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RESEARCH ARTICLE

The perceptions of South African dietetic and nutrition professionals on sponsorship and funding of scientific education opportunities by Big Food

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Objective: To determine the perceptions of South African dietetic and nutrition professionals on sponsorship and funding of scientific education opportunities by Big Food.
Setting: South Africa.
Subjects and methods: Members of the Association for Dietetics in South Africa (ADSA), the Nutrition Society of South Africa (NSSA), and the Dietetics-Nutrition is a Profession (DIP) groups (excluding students) were invited to participate in an online survey using census and snowball sampling ($n = 118$). The survey used a Likert scale to record responses to experience and perception questions and included a brief demographic section. Additionally, dietetic/nutrition professionals were recruited for semi-structured interviews ($n = 10$) using purposive sampling. An interview guide with open-ended and probing questions, where necessary, was used.
Results: Perceptions of dietetic and nutrition professionals regarding Big Food sponsorship of scientific education opportunities varied. The majority (88%; $n = 104$) felt collaboration should be encouraged, particularly to improve the nutritional content of unhealthy products. Others expressed hesitance and strong disagreement, citing real or perceived conflict of interest (COI) and concerns regarding the scientific credibility of research presented. There was consensus from 90% of participants ($n = 106$) on the need for clear guidelines defining acceptable sponsorship and funding, including transparency and disclosure. Upholding and adhering to professional ethical standards should also remain a priority for dietetic and nutrition professionals, as emphasised by participants during the semi-structured interviews.
Conclusion: The research indicates diverse perceptions among South African dietetic and nutrition professionals on the sponsorship and funding of scientific education opportunities by Big Food, emphasising the complex nature of interactions with multinationals. The importance of establishing consensus guidelines on collaborations that adhere to professional ethical standards was underscored.

Keywords: Big Food, conflict of interest, dietetic and nutrition professionals, scientific education opportunities

Introduction

Big Food refers to large multinational food and beverage companies with substantial and concentrated power that dominate the global food system through extensive production, marketing and distribution of ultra-processed food (UPF) products.[1] More than 20 years ago Igumbor et al.[2] described the presence of Big Food in South Africa as encompassing both local companies and multinational corporations, primarily from North America and Europe, some of which have expanded into other African counties. These companies have implemented strategies to boost the availability, affordability, and appeal of their products, alongside launching various 'health and wellness' initiatives. Given the growing health concerns linked to the food environment, the authors urged the South African government at the time to act in educating the public on the risks of unhealthy diets, regulating the activities of Big Food, and promoting access to nutritious food options.[2] Two decades later, most low-income South Africans consume high amounts of UPFs, which significantly contribute to their energy intake and are linked to increased risks of non-communicable diseases (NCDs) due to excessive sodium, sugar, and fat. The population also tend to have poor dietary diversity and insufficient intake of protective foods like fibre, legumes, fruits, and vegetables. These findings underscore the urgent need for policy action to curb the spread of harmful UPFs and to support access to healthier, minimally processed alternatives.[3]

Over time, healthcare professionals have increasingly recognised the strategic influence of Big Food in promoting unhealthy food products.[4] In response, frameworks and guidelines are being developed on a global level to manage COI and ensure ethical engagement between healthcare professionals and industry stakeholders[5,6] in various settings and purposes, including through scientific education opportunities. Scientific education opportunities provide a platform for healthcare professionals, including dietetic and nutrition professionals, to network and exchange evidence-based information.[7] While sponsorship and funding sources for scientific education opportunities vary in form, there is a growing concern regarding the lack of financial support by non-food-related companies and government organisations for these events. This has resulted in a reliance on Big Food to sponsor and fund scientific education opportunities.[8] With Big Food becoming increasingly involved in the sponsorship and funding of scientific education opportunities, the potential for undue influence on collaboration, nutrition research and professional practices arises, all whilst these companies cultivate brand loyalty and maximise profit.[8] Moreover, these profits are utilised to drive activities such as lobbying[1], marketing campaigns and the support of scientific affiliations, all of which raise concerns over the misalignment between commercial interest and public health objectives.[9]

This article examines the perceptions of South African dietetic and nutrition professionals regarding the sponsorship and funding of scientific education opportunities by Big Food.

Methodology

Study design

This study employed a concurrent parallel mixed-methods design comprising a quantitative online survey and qualitative semi-structured interviews. The primary aim was to explore the experiences and perceptions of South African dietetic and nutrition professionals regarding sponsorship and funding of scientific education opportunities by Big Food. Both data collection phases were conducted simultaneously and analysed independently, with integration occurring at the interpretation stage to enable triangulation of findings.

Quantitative phase: online survey

The online survey was developed using SunSurvey, a web-based survey platform available to Stellenbosch University researchers. The questionnaire was informed by a review of international literature on conflicts of interest (COI) in nutrition science and healthcare, as well as professional ethics guidelines. The survey consisted of four sections: (1) Informed consent; (2) Demographics (e.g. professional role, years of experience, sector); (3) Experience with industry (e.g. acceptance of sponsorship, attendance at industry-funded events); and (4) Perceptions of sponsorship (e.g. ethical acceptability, influence on credibility and scientific integrity).

The main body included 8 closed-ended questions measured using a 5-point Likert scale (from 'strongly agree' to 'strongly disagree'), and one optional open-ended question for additional comments. The survey was piloted with five professionals ($n = 5$) who matched the study's target population. They assessed the questionnaire for clarity, relevance, and length. Based on their feedback, minor adjustments were made to wording and structure, improving readability and face validity.

Qualitative phase: semi-structured interviews

A semi-structured interview guide was developed to explore participants' in-depth perceptions, ethical reasoning, and personal experiences regarding Big Food sponsorship. The guide was informed by literature, the survey questions, and initial survey results. It covered the following core themes: (1) Experiences with industry-sponsored educational events; (2) Ethical views on accepting funding or sponsorship; (3) Perceived impacts on professional credibility and public trust; and (4) Suggestions for managing COI in the profession.

The guide was reviewed by three international experts in COI and public health ethics. Feedback was used to restructure some questions, clarify terminology, and refine the interview flow. A purposive sample of 10 registered dietitians and nutrition professionals was selected, ensuring representation across different sectors (public, private, academia, and industry). Invitations were sent via email and included an information leaflet and consent form. All interviews were conducted in English via MS Teams (Microsoft Corp, Redmond, WA, USA), lasting between 45–120 minutes, and were scheduled at the participants' convenience. Interviews were audio-recorded and transcribed verbatim.

Sample

The survey targeted members of the Association for Dietetics in South Africa (ADSA), the Nutrition Society of South Africa (NSSA), and the Dietetics-Nutrition is a Profession (DIP) Facebook group. With the assistance of a statistician, the required sample size was calculated based on the estimated population of registered professionals, a 95% confidence level, and a 10% margin of error. The target was adjusted for an anticipated 20% response rate. A total of 118 responses were analysed.

A total of 10 interviews were conducted, which was considered sufficient to reach data saturation, confirmed when no new themes emerged in the final interviews. Participants were recruited via purposive and snowball sampling from professional networks and survey respondents who consented to be contacted for follow-up.

Data collection

The survey remained open for five weeks and was distributed via ADSA, NSSA, and DIP mailing lists. Estimated completion time was approximately 7 minutes. Participants provided digital consent before accessing the survey. Interviews were scheduled based on participant availability. Verbal and written informed consent were obtained before each interview. All interviews were audio-recorded, transcribed manually by the principal investigator, and reviewed for accuracy by listening to the original recording while reading each transcript.

Data analysis

Survey data were automatically exported and summarised using Microsoft Excel. Descriptive statistics were used to analyse responses to Likert scale items and experience-based questions. Where appropriate, cross-tabulations were conducted to compare responses across demographic groups. Interview transcripts were analysed using thematic analysis. The principal investigator conducted manual hand-coding to identify key themes and subthemes. An initial codebook was developed inductively and refined through iterative coding. Themes were reviewed for internal consistency and relevance to the study objectives. While formal inter-coder reliability was not assessed, codes and themes were discussed with an independent researcher to ensure credibility.

Ethical considerations

Ethical approval was obtained from the Stellenbosch University Health Research Ethics Committee (Ref. no. S23/09/202). All participants were informed of their rights, including voluntary participation, confidentiality, and the right to withdraw at any time. Survey data were anonymized, and interview transcripts were de-identified. All data were securely stored on password-protected servers in accordance with institutional data protection policies. No compensation was offered for participation.

Results and discussion

Demographic data

Table 1 provides a summary of the demographic data collected from both the survey and interview participants.

The mean age of the interviewees and survey participants was 41 (SD = 7.34) and 35 years (SD = 10.26) respectively. The majority (42.3%; $n = 50$ and 40.6%; $n = 48$) of survey participants are currently working in the public and private sector respectively, while the minority (6.77%; $n = 8$) currently work in the industry sector.

Table 1: Summary of demographic data collected from all research participants

Item	Survey data (*n*) (total = 118)	Interview data (*n*) (total = 10)
Age		
21–30	40	0
31–40	41	2
41–50	28	4
51–60	7	4
Not specified	2	0
Education		
Bachelor's degree (Hons)	74	2
Postgraduate diploma	14	1
Master's degree	23	2
Doctorate degree	7	5
Employment status		
Employed	71	8
Self-employed	30	2
Unemployed	17	0
Professional affiliation		
Public sector	50	2
Private sector	48	2
Academia/Scientific committee		4
Industry	8	2
Other	12	0

Of the 118 survey participants, 61% ($n = 72$) and 100% ($n = 10$) of the interview participants indicated that they had attended a scientific education opportunity sponsored by Big Food. In addition, 18.6% ($n = 22$) of the survey participants have previously accepted a form of sponsorship from Big Food for reasons pertaining to research funding and attending conferences, which included having their travel and catering expenses covered. Of the 22 participants, 72.7% ($n = 16$) have a postgraduate degree.

Participant responses to Big Food sponsorship of scientific education opportunities

As shown in Figure 1, almost two-thirds (60.1.%; $n = 71$) of the survey participants either agreed (39.8%; $n = 47$) or strongly agreed (20.3%; $n = 24$) that Big Food should be permitted to sponsor and/or fund scientific education opportunities. Of those, 46.4% ($n = 33$) represented the public sector, 36.3% ($n = 26$) represented the private sector, 11.2% ($n = 8$) represented the industry sector, and the remaining 5.6% ($n = 4$) was made up of those who fell into neither of the above-mentioned sectors. As expected, all eight participants currently working in the industry sector agreed or strongly agreed that Big Food should sponsor scientific education opportunities. Less than a fifth (19.5%; $n = 23$) indicated that they 'strongly disagreed' (9.3%; $n = 11$) or 'disagreed' (10.2%; $n = 12$) that Big Food sponsorship should be permissible.

Over half (55.9%; $n = 66$) 'strongly agreed' and almost a third (32.2%; $n = 38$) 'agreed' that there is a lack of financial support from government and other non-food-related companies, indicating that the large majority (88.1%) are of the impression that government and other non-food-related companies do not actively support scientific education opportunities. This finding reflects a perceived funding gap, which may explain participants' openness towards alternative sponsorship sources, particularly Big Food.

One participant acknowledged that Big Food companies are the ones able to provide financial input and felt that, in the context of enabling nutrition education, such sponsorship is permissible.

When indicating whether participants agreed that there are adequate policies and strategies in place that effectively protect healthcare professionals from unwanted interactions with multinationals, one-third (33%; $n = 39$) 'disagreed'. This aligns with the results from the semi-structured interviews, where participants' perceptions reflected a concern around insufficient regulatory frameworks and a need for improved monitoring and enforcement mechanisms. A large majority (88%; $n = 104$) either 'agreed' or 'strongly agreed' that dietetic and nutrition professionals should be encouraged to collaborate with Big Food to modify unhealthy foods to healthier options, instead of being against them. One survey participant made an additional comment, feeling strongly that engagement between dietetic and nutrition professionals and Big Food is necessary for positive change, as these companies already have extensive societal influence. While this reflects a collaborative mindset amongst participants, it may also point to limited awareness of the influence of COI in the context of Big Food engagement. Available evidence highlights the use of corporate social responsibility (CSR) strategies[10] employed by Big Food to 'develop a public image of a responsible and "good" corporate citizen that is associated with positive attributes and thus work to build brand awareness and preference within the population'.

Half (51.6%; $n = 61$) and over a third (38.1%; $n = 45$) of participants 'strongly agreed' and 'agreed', respectively, that health initiatives which aim to encourage healthier food choices would be more effective if there were engagement between dietetic and nutrition professionals and Big Food. This supported the qualitative research results, where many participants perceived an opportunity for impactful change if guided engagement existed. One survey participant referenced the need for stringent policies to be designed that allowed for engagement between Big Food and dietetic and nutrition professionals while avoiding undue influence. Another participant expressed a more supportive stance to collaborate with Big Food companies that produce a healthier range of products, but indicated a strong stance against engagement with those who specifically produce commercial milk formula. The participant further acknowledged that healthcare professionals' credibility would be better protected if such engagement did not exist and stressed the need for regulations that ensure COI-free interaction.

When asked to indicate an emotion that best describes how participants would feel if they were to receive a scientific programme with a Big Food logo on it, more than half (56.7%; $n = 67$) indicated that this would not have an effect on them, less than 10% (7.6%; $n = 9$) indicated that they would feel 'proud', and a third (33.8%; $n = 40$) expressed feelings of 'anger' and 'disappointment'. Interestingly, of the 15 participants who indicated that they would feel 'embarrassed', 4 formed part of the 51.6% of participants who 'strongly agreed' that dietetic and nutrition professionals should collaborate with Big Food to achieve effective healthier eating initiatives. This indicates a contrast between participants' feelings of

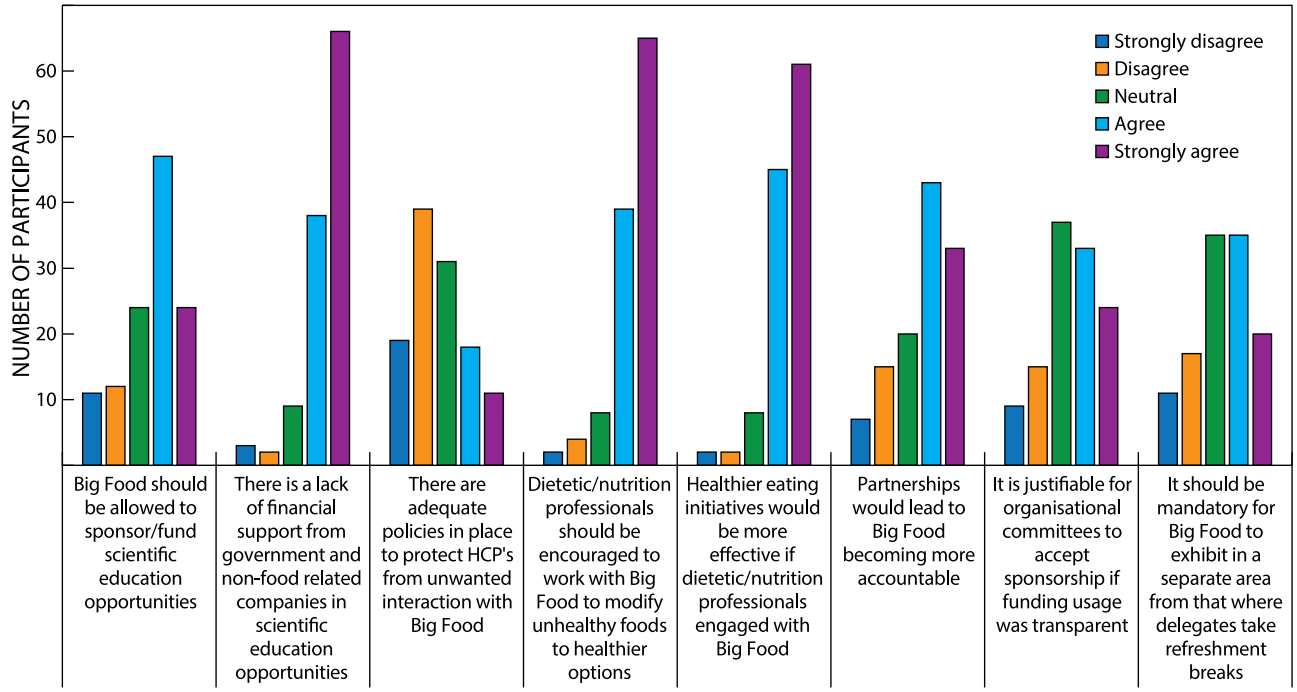

Figure 1: Grouped bar graph representing participant responses to online survey.

embarrassment and their belief in collaborating with Big Food in support of initiatives that promote healthy eating. When considering whether partnerships between dietetic and nutrition professionals and Big Food could lead to the latter becoming more accountable, two-thirds (66.4%; $n = 76$) agreed that this could potentially be a benefit towards such collaboration, while less than 20% (18.6%; $n = 22$) disagreed with this statement. The remaining 16.9% ($n = 20$) were neither in agreement or disagreement. A participant who stated that they would feel 'disappointed' if they were to receive a scientific programme with a Big Food logo on it expressed doubt that engagement between dietetic and nutrition professionals and Big Food would result in improved nutritional quality of their product portfolio. While this person acknowledged and believed that dietitians should have a role to play within Big Food, it was stated that, without rigorous legislative implications, companies will continue to produce unhealthy products regardless of dietitians' involvement.

> 'The heart of this conflict is that we have different interests — as health professionals, we are concerned with public health, but companies are concerned with profits …. Industry will only change in response to fiscal or legislative pressure, not out of an altruistic desire to do good.' (Participant ID: 1752187 — Private sector)

Cullerton et al. have a similar view, stating that such actions are unlikely to occur without external pressure.[6]

Regarding the transparency of Big Food sponsorship in the context of research agendas and scientific programmes, participants were asked their perception on whether or not such financial inputs would be justifiable if it were clearly stated that neither the information being presented nor the event agenda were impacted by the sponsorship. The survey results contrasted with those of the qualitative research, with almost a third (31.3%; $n = 37$) of participants neither agreeing nor disagreeing with the statement. Just over a quarter (27.9%; $n = 33$) indicated that they agreed with this, while the large majority (90%; $n = 106$) stated that ensuring transparency and a well-implemented disclosure policy is a top priority. Some survey respondents provided further insight on this, with one participant raising a concern that industry-funded research could lead to biased results that favour the sponsoring company.

> 'I do not think it is wise or a good idea for dietetic and nutrition professionals to receive funds or funding from Big Food companies as results or outcomes of the study may be biased.' (Participant ID: 1751657 — Public sector)

In line with this, another participant pointed to the need for transparency in all forms of engagement between dietetic and nutrition professionals and Big Food, stating that, without this, real or perceived bias and COI could cause distrust between professionals and the public. While transparency is essential, these responses illustrate that disclosure alone may not be enough to fully address concerns over credibility and public trust.

Regarding the dissemination of promotional material and displaying of posters and exhibition stands, almost half (46.6%; $n = 55$) of participants agreed that these should be displayed in a separate area from where delegates have their refreshment breaks at scientific educational opportunities, to allow them to choose whether or not to engage with Big Food. As one participant commented:

> 'This separation is important to maintain the integrity of the educational environment and prevent any potential influence or bias on attendees' perceptions or decisions related to nutrition.' (Participant ID: 1751655 — Public sector)

A quarter (23.7%; $n = 28$) 'disagreed' and the remaining, almost a third (29.6%; $n = 35$), were neither in 'agreement nor disagreement' about the placing of marketing material.

Dietetic and nutrition professionals' experiences of Big Food sponsorship of scientific education opportunities

Interview participants conveyed mixed emotions when reflecting on Big Food logos at scientific education opportunities, including irony, discontent, joy, pride, and support. Individual experiences significantly influenced perceptions of COI. One participant noted how their professional growth and increased exposure to literature shaped their evolving views:

> 'I have seen quite a number at our conferences in past years and I didn't have a problem. I didn't see anything wrong. So that's many years back, but as I grew in the profession and come to understand and more literature came out and discussions around conflict of interest, I started questioning those things and really start thinking about it and really seeing how we've been influenced even before ourselves.' (Participant 002 — Public sector)

Another interviewee expressed concern regarding a specific Big Food company that previously sponsored scientific education events, arguing their product portfolio conflicts with the values dietitians promote. This perception aligns with Flint,[11] who argues that many scientific education opportunities promote values contradictory to those of Big Food. Fanzo et al.[8] stressed the role of advocating for a 'health-promoting and disease-preventing' diet, which often clashes with multinational food and beverage companies' practices.

A participant with experience on a congress scientific committee reflected on how earlier positive views of sponsorship changed over time:

> 'I do think back in the day, I was quite ignorant, probably like many others. This whole thing has evolved and our understanding of this has evolved. Obviously, I've had my own personal journey when it comes to conflict of interest and Big Food companies. We haven't always had positive interactions with them.' (Participant 005 — Academia)

In contrast, one participant saw sponsorship as 'unrelenting support', while another felt pride in such partnerships and encouraged dietitians to 'embrace' sponsorship like other health professionals. Another participant described Big Food's involvement as a 'catch-22': needing access to evidence-based information while acknowledging the reliance on sponsorship for event logistics. These diverse views highlight the ongoing need for critical dialogue over Big Food's role in professional education.

Balancing Big Food support and independence in scientific education opportunities

Gunnarsson et al.[7] and Wood et al.[4] underscore the importance of scientific education for knowledge-sharing and networking. However, the problematic role of Big Food in promoting unhealthy diets remains. One participant explained how these companies strategically involve professionals:

> 'It's part of their [Big Food companies] marketing strategy to bring a dietitian on board to be seen that they are serious, and they actually make you believe that they will listen to you.' (Participant 002 — Public sector)

Most participants valued education opportunities for networking and knowledge exchange. Still, some questioned whether these events could continue without Big Food funding. One participant criticised the profession's resistance to sponsorship:

> 'I think the sponsorship thing is a non-issue, but dietitians are making it into an issue and it's only going to be at the detriment of us accessing more funding.' (Participant 009 — Private sector)

Others felt that the profession should reconsider the format of such events, suggesting lower-cost venues over expensive hotels. One recalled a successful, low-cost event at a university where participants paid for their own meals.

The International Congress of Dietetics 2021 (ICD2021) organised from South Africa is an example of a successful event held without Big Food sponsorship. The committee only accepted support from companies aligned with the conference's goals.[12,13] Similarly, the 2023 Latin American Society of Nutrition (SLAN) congress in Ecuador was held free of COI, using registration fees to support low-income delegates and hosting at public venues with no rental costs.[13]

Concerns pertaining to engagement with Big Food

Cullerton et al.[9] highlight the difficulty in setting guidelines for acceptable sponsorship by multinationals, particularly due to the heterogeneity of Big Food product ranges. Many participants echoed concerns regarding the challenge of defining acceptable sponsorship and advocated for more 'neutral' sponsors. Galea and McKee[14] propose five tests for evaluating public–private partnerships (PPPs), with the first assessing whether a company's core products are health-enhancing or damaging.

One participant referred to a local retailer previously known for selling healthy food but now also offering unhealthy products, highlighting the difficulty of identifying acceptable sponsors:

> 'It's so difficult to find that "pure company". We cannot partner in part. The whole must qualify to be a partner. We can't say unhealthy food is not good. And then we partner with a company that sells unhealthy food.' (Participant 002 — Public sector)

Another interviewee noted the complexity of Big Food's structures and argued that professionals should engage with appropriate products rather than avoiding all contact. The participant referred to a well-known brand that had been sponsoring events, unaware it was half-owned by a Big Food company:

> '[Big Food company X] has been in control of 50% of shares of [Company X] for the last eight years, but we were quite happy to work with them because we don't always know what's going on or who owns [the company].' (Participant 008 — Private sector)

The participant further proposed:

> 'There is a need for some criteria, preferably globally, where we will look into more specific details of the companies' range of products, percentage of products that fall within healthy eating criteria and portion sizes instead of a decision just coming down to a "yes or no".' (Participant 008 — Private sector)

Kraak and Story[5] acknowledge the absence of international consensus on acceptable interaction types. In response, Cullerton et al.[6] developed the Food Research Risk (FoRK) toolkit, while the WHO COI toolkit offers guidance on managing engagement risk.[15]

Another participant cited convenience and pre-existing relationships between associations and sponsors as influencing factors. After a professional body banned commercial milk formula sponsorships, the lack of alternatives created a funding gap:

> 'The societies used to always go to the same guys for funding …. And since [association name omitted] in 2018 changed policy to say starting off we're not receiving any money from the infant formula industry, that left quite a big gap … . So, a stance against one thing creates a gap.' (Participant 008 — Private sector)

While neutral sponsorship was widely debated, suggestions included banks, insurers, mobile service providers, nutrition-related equipment suppliers, databases, and textbook publishers as alternatives to food-based sponsors.

Promoting transparency and responsible practice in Big Food-sponsored scientific education opportunities

In the context of Big Food-sponsored education, full transparency is vital to uphold scientific credibility and prevent undue influence over the information shared with professionals and the public.

Nicklas et al.[16] stress that while COI disclosure is standard for publications, it is not sufficient, as the conflict still exists. Research confirms that corporate sponsorship can bias study design, reporting, and conclusions in favour of the sponsor.[17–24] These concerns were echoed by participants, who feared such practices could undermine the credibility of information shared at educational events.

One participant, who had served on an international conference committee, recalled a company wanting to sponsor a session without submitting an abstract. Although they believed some companies were more scientifically sound, concerns over the influence on brand perception remained.

In contrast, another participant believed scientific credibility remains intact:

> 'I think it doesn't happen often that the scientific output will be challenged or that there would be any loss of integrity in the process.' (Participant 005 — Academia)

Similarly, another interviewee felt that abstract-driven content ensured integrity but noted that workshops or satellite sessions led by invited experts may be more susceptible to sponsor influence.

Navigating the impact of Big Food presence at scientific education opportunities

Some participants viewed the sharing of promotional material at scientific events as acceptable if the scientific credibility of the content was upheld. One participant distinguished between sponsorship and exhibition, explaining that sponsorship involves logo advertising for funding, while exhibitions focus on product information, allowing for informed discussion and stimulating thought. Another agreed, but suggested giveaways be restricted to informational content only.

Concerns were raised regarding branded giveaways influencing professional judgement, and one participant rejected all multinational engagement:

> 'I cannot sit in the presence of people that are doing what I wholeheartedly believe is wrong.' (Participant 002 — Public sector)

In contrast, another participant supported branded giveaways, seeing them as adding enjoyment to events:

> 'I have never been persuaded by a pen to do anything. Everybody knows, when you have a cake, you feel good. When you have a sweet, it's nice. Do we want the conferences to be dry, boring, just academic stuff with no enjoyment of it? For me it doesn't make sense.' (Participant 007 — Industry)

Overall, participants recommended limiting promotional material to informative content rather than branded gifts, aiming to balance engagement with ethical practice.

Collaboration between dietetic and nutrition professionals and Big Food: is it necessary?

Participants expressed diverse views. Some saw value in dietitians working with multinationals to promote healthier products, while others argued that Big Food distracts from efforts to reduce NCDs and raised ethical concerns about PPPs.

One participant noted that many industry-based professionals oppose excessive commercialisation and can promote gradual change. Another warned against demonising those who work with Big Food, advocating for guided, rather than prohibited, interaction:

> 'There are people who think no nutrition professionals should work for food industry. How will we ever improve nutrition if the knowledgeable, the professionals are not involved in food industry? They must work for nutrition companies. And we should not crucify them for doing so.' (Participant 003 — Academia)

However, a contrasting view was strongly expressed:

> 'We have invested money, time, our time in these meetings, thinking we are going somewhere. And I realised that you're [industry] actually distracting us from where we are supposed to put the efforts. We are going nowhere slowly.' (Participant 002 — Public sector)

One participant took a conditional view, supporting engagement only if it was part of a broader food systems approach, especially given the limited food choices many South Africans face:

> 'So if you're thinking for 60 million people … don't be naive and think people can choose what they're buying. So, if we can help through regulations and

> technical input to get the products that those 60 million people have access to be of better nutritional value absolutely, yes. So, I see it as part of a bigger food system approach …. So, my answer is yes, but conditional. It needs to be part of a bigger shift.' (Participant 008 — Private sector)

This perspective highlights the need for meaningful, transparent engagement within a well-governed, transdisciplinary nutrition framework. However, as Yates et al.[25] point out, transparency and responsibility often involve contested power dynamics.

Study limitations

Specific definitions of 'scientific education opportunities and Big Food' were not provided to participants and were thus open to interpretation in the online survey. Additionally, the distinction between sponsorship and exhibition was not explicitly made, which may have contributed to varied or conflated interpretations of industry engagement. Online surveys may also lead to self-selection bias[26] as certain individuals may be more willing to complete an online survey than others, and the perceptions of those who participate may be different from those who do not participate. This is, however, true for all surveys and to mitigate the situation a qualitative component was added to the research. Furthermore, the results from the online survey can only be generalised with a condition that assumes low pairwise correlation.

Qualitative research involving a small sample size limits the ability to generalise results to a larger population and relies heavily on the researcher's interpretation and subjective analysis of the data. To combat the risk of preconceived bias, the semi-structured interview guide was reviewed for quality and content validity purposes by two internationally based nutrition professionals with extensive knowledge of COI. The principal investigator/first author also consulted with the co-authors regarding the dataset on a continuous basis to guard against bias.

Conclusion and recommendations

This research sheds light on the challenges surrounding perceptions in the field of nutrition and dietetics, specifically in the context of sponsorship and funding of scientific education opportunities by Big Food. Harnessing financial support from Big Food while maintaining credibility and integrity remains a challenging and contentious topic among dietetic and nutrition professionals in South Africa. While the majority of participants expressed support for some form of engagement between dietetic and nutrition professionals and Big Food, particularly in efforts to modify unhealthy products to healthier options, others raised strong concerns regarding the prioritisation of commercial interests over public health goals.

Participants also drew attention to a perceived lack of financial support from non-food-related companies and government in nutrition-related scientific education opportunities, with the majority agreeing with this sentiment. The need for consensus guidelines on ethical interaction between dietetic and nutrition professionals and Big Food was emphasised. Furthermore, transparency and full disclosure measures were mentioned as crucial aspects of maintaining scientific trust between health professionals and the public. It was suggested that pooling funds and avoiding dominance by one specific Big Food company could be part of a solution in preventing any undue influence over event agendas or speaker selections at scientific education opportunities. Galea and McKee[12] argue this could be possible; however, only under conditioned terms in which power can be rebalanced.

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Authorship – The principal investigator, TKS, planned the study, conducted the data collection, analysed the data using the relevant software, and interpreted the data. LMdP and JB provided extensive input throughout all stages of the research process.

Ethical standards disclosure – This study was conducted according to the guidelines laid down in the Declaration of Helsinki and all procedures involving research study participants were approved by the Stellenbosch University Health Research Ethics Committee (Ref. no. S23/09/202). Approval was also obtained from ADSA, NSSA, and the DIP group to disseminate the online survey link through their relevant news forums. Informed consent was obtained from each participant at the beginning of the survey and prior to the start of the semi-structured interviews. The informed consent forms for both research components included consent for information obtained to be shared anonymously for publication purposes. The informed consent form for the semi-structured interviews also included consent to be audio-recorded. Participants' autonomy and confidentiality were respected and maintained for the entirety of the research project.

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References

1. Slater S, Lawrence M, Wood B, et al. Corporate interest groups and their implications for global food governance: mapping and analysing the global corporate influence network of the transnational ultra-processed food industry. Global Health. 2024;20(1):1–15. https://doi.org/10.1186/s12992-024-01020-4.
2. Igumbor EU, Sanders D, Puoane TR, et al. 'Big Food,' the consumer food environment, health, and the policy response in South Africa. PLoS Med. 2012;9(7):e1001253. https://doi.org/10.1371/journal.pmed.1001253.
3. Frank T, Ng SW, Lowery CM, et al. Dietary intake of low-income adults in South Africa: ultra-processed food consumption a cause for concern. Public Health Nutr. 2024;27(1):e41. https://doi.org/10.1017/S1368980023002811.
4. Wood B, Williams O, Nagarajan V, et al. Market strategies used by processed food manufacturers to increase and consolidate their power: a systematic review and document analysis. Global Health. 2021;17(1):1–23. https://doi.org/10.1186/s12992-021-00667-7
5. Kraak VI, Story M. Guiding principles and a decision-making framework for stakeholders pursuing healthy food environments. Health Aff. 2015;34(11):1972–1978. https://doi.org/10.1377/hlthaff.2015.0635.
6. Cullerton K, Adams J, Forouhi NG, et al. Avoiding conflicts of interest and reputational risks associated with population research on food and nutrition: the Food Research risK (FoRK) guidance and toolkit for researchers. Br Med J. 2024;384:e077908 https://doi.org/10.1136/bmj-2023-077908.
7. Gunnarsson AJ, Ruskin G, Stuckler D, et al. Big Food companies and drink sponsorship of conferences and speakers: a case study of one multinational company's influence over knowledge dissemination and professional engagement. Public Health Nutr. 2023;26(5):1094–1111. https://doi.org/10.1017/S1368980022002506.
8. Fanzo J, Haddad L, Schneider KR, et al. Viewpoint: rigorous monitoring is necessary to guide food system transformation in the

countdown to the 2030 global goals. Food Policy. 2021;104:102163. https://doi.org/10.1016/j.foodpol.2021.102163
9. Cullerton K, Adams J, Forouhi N, et al. What principles should guide interactions between population health researchers and the food industry? Systematic scoping review of peer-reviewed and grey literature. Obes Rev. 2019;20(8):1073–1084. https://doi.org/10.1111/obr.12851.
10. Richards Z, Thomas SL, Randle M, et al. Corporate social responsibility programs of Big Food in Australia: A content analysis of industry documents. Aust N Z J Public Health. 2015;39(6):550–556. https://doi.org/10.1111/1753-6405.12429.
11. Flint S. Are we selling our souls? Novel aspects of the presence in academic conferences of brands linked to ill health. J Epidemiol Community Health. 2016;70:739–740. https://doi.org/10.1136/jech-2015-206586.
12. Sponsorship Document. (n.d.). www.icd2021.com.
13. Harris J, Carriedo A, Friere W, et al. Conflict of interest in nutrition conference financing: moving towards solutions after IUNS 2022. World Nutrition. 2022;13(4):54–63. https://doi.org/10.26596/wn.202213454-63.
14. Galea G, McKee M. Public-private partnerships with large corporations: setting the ground rules for better health. Health Policy. 2014;115(2–3):138–140. https://doi.org/10.1016/j.healthpol.2014.02.003.
15. Harris J, Nisbett N, Gillespie S. Conflict of interest in nutrition: where's the power? Comment on 'towards preventing and managing conflict of interest in nutrition policy? An analysis of submissions to a consultation on a draft WHO tool.'. Int J Health Policy Manag. 2022;11(3):391–393. https://doi.org/10.34172/ijhpm.2020.177
16. Nicklas TA, Karmally W, O'Neil CE. Nutrition professionals are obligated to follow ethical guidelines when conducting industry-funded research. J Am Diet Assoc. 2011;111(12):1931–1932. https://doi.org/10.1016/j.jada.2011.10.014.
17. Fabbri A, Holland TJ, Bero LA. Food industry sponsorship of academic research: investigating commercial bias in the research agenda. Public Health Nutr. 2018;21(18):3422–3430. https://doi.org/10.1017/S1368980018002100.
18. Besancon S, Beran D, Batal M. A study is 21 times more likely to find unfavourable results about the nutrition label nutri-score if the authors declare a conflict of interest or the study is funded by the food industry. BMJ Global Health. 2023;8(5):e011720. https://doi.org/10.1136/bmjgh-2023-011720
19. Sacks G, Riesenberg D, Mialon M, et al. The characteristics and extent of food industry involvement in peer-reviewed research articles from 10 leading nutritionrelated journals in 2018. PLoS One. 2020;15(12):e0243144. https://doi.org/10.1371/journal.pone.0243144
20. Lundh A, Lexchin J, Mintzes B, et al. Industry sponsorship and research outcome (review). Cochrane Database Syst Rev. 2017;2017(2):1–113. https://doi.org/10.1002/14651858.MR000033.PUB3
21. Flacco ME, Manzoli L, Boccia S, et al. Head-to-head randomized trials are mostly industry sponsored and almost always favor the industry sponsor. J Clin Epidemiol. 2015;68(7):811–820. https://doi.org/10.1016/j.jclinepi.2014.12.016
22. Bes-Rastrollo M, Schulze MB, Ruiz-Canela M, et al. 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. https://doi.org/10.1371/journal.pmed.1001578.
23. Stamatakis E, Weiler R, Ioannidis JPA. Undue industry influences that distort healthcare research, strategy, expenditure and practice: a review. Eur J Clin Investig. 2013;43(5):469–475. https://doi.org/10.1111/eci.12074.
24. Lesser LI, Ebbeling CB, Goozner M, et al. Relationship between funding source and conclusion among nutrition-related scientific articles methods and findings. PLoS Med. 2007;4(1):e5. https://doi.org/10.1371/journal.pmed.0040005
25. Yates J, Gillespie S, Savona N, et al. Trust and responsibility in food systems transformation. Engaging with Big Food: marriage or mirage? BMJ Global Health. 2021;6(11):e007350. https://doi.org/10.1136/bmjgh-2021-007350.
26. Wright KB. Researching internet-based populations: advantages and disadvantages of online survey research, online questionnaire authoring software packages, and web survey services. J Comput Mediat Commun. 2005;10(3):JCMC1034. https://doi.org/10.1111/j.1083-6101.2005.tb00259.x.

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