

Perceptions towards unhealthy food sponsorship in junior sports in Victoria, Australia

Christina Zorbas,^{1*} Florentine Martino,¹ Tara Heneghan,² Jane Potter,² Melanie Chisholm,² Adrian J. Cameron,¹ Gary Sacks,¹ Jaithri Ananthapavan,^{1,3} Kathryn Backholer¹

¹Deakin University, Global Centre for Preventive Health and Nutrition, Institute for Health Transformation, School of Health and Social Development, Faculty of Health, Geelong, Australia

²The Victorian Health Promotion Foundation (VicHealth), Australia

³Deakin University, Deakin Health Economics, Institute for Health Transformation, School of Health and Social Development, Faculty of Health, Geelong, Australia

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Abstract

Objective: To explore Victorian parents' and club officials' engagement with, and attitudes towards, the sponsorship of junior sports by unhealthy food and beverage companies.

Methods: We conducted online surveys with 504 parents of children participating in junior sports and 16 semi-structured interviews with junior sports club officials (from clubs that accepted unhealthy food sponsorship) in Victoria, Australia.

Results: Most parents were concerned about children's exposure to sponsorship by unhealthy local (58% extremely, very or moderately concerned) and large food companies (63%) in junior sports. The views of sporting club officials were grouped into four themes: (1) the existing funding challenges for junior sports, (2) how junior sports sponsorship is community dependent, (3) how the perceived risks of sponsorship by unhealthy food companies are low and (4) the need for high-level regulations and support to transition towards healthier junior sports sponsorship.

Conclusions: Transitioning towards healthier junior sports sponsorship may be hindered by insufficient funding models and low concern for such actions by community leaders.

Implications for Public Health: Policy actions from higher-level sporting governing bodies and governments are likely to be necessary to reduce harmful junior sports sponsorship, alongside restrictions on the marketing of unhealthy foods through other media and settings.

Key words: food marketing, sponsorship, junior sport, childhood obesity

Introduction

Globally, approximately 39 million children under the age of 5 years and 340 million children and adolescents between the ages of 5 and 19 years experience overweight or obesity.¹ In Australia, this equates to approximately one-quarter of children experiencing overweight or obesity.² Dietary factors are leading contributors to the current global burden of obesity among children, with their impact having increased over the last three decades. Important contributing factors are the globalisation of food supplies and the expansion of powerful transnational food and beverage corporations, both of which have contributed to the creation of food environments that promote purchases of potentially harmful products that tend to be energy dense and nutrient poor.³ The pervasive

marketing of unhealthy foods and beverages—especially towards children—has been identified as a key avenue through which these foods and beverages have become normalised in society, contributing to the increased consumption of these products.^{3,4}

To reduce the prevalence of obesity and overweight among children, the World Health Organization recommends governments implement comprehensive regulations to reduce children's exposure to unhealthy food and beverage marketing.^{4,5} Sponsorship is a widely used marketing tactic, with corporations providing monetary or in-kind contributions to an event, activity or organisation/group, with the expectation that this increased exposure to and awareness of their brand increases preferences for and/or purchases intentions.⁶ Sponsorship of elite, community and junior sport is an especially

Abbreviations

A\$, Australian dollars.

*Correspondence to: Christina Zorbas, Deakin University, Global Obesity Centre, Institute for Health Transformation, School of Health and Social Development, Faculty of Health, Geelong, Australia.

e-mail: c.zorbas@deakin.edu.au.

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wide-reaching marketing opportunity, with large and captive audiences, including children, across various media and platforms (e.g. stadiums, TV, radio, social media, etc.).^{7,8} Despite sports clubs being in an excellent position to promote health and well-being via their focus on physical activity, sports sponsorship by industries that promote unhealthy products (including energy-dense, nutrient-poor foods and beverages, alcohol and gambling companies) is commonplace.⁹ This undermines children's right to healthy environments, free from commercial exploitation.¹⁰

In Australia, two-thirds of children are estimated to participate in community sports.² In 2019, an audit of junior sports clubs in Victoria, Australia, revealed that approximately one-quarter of all clubs accepted sponsorship from food, beverage and alcohol companies.¹¹ The proportion of clubs accepting sponsorship from unhealthy food companies was highest for football (Australian rules football) (50%), soccer (48%), netball (35%) and cricket (30%) clubs, with clubs in regional areas 2.1 times more likely to be associated with unhealthy food sponsors than clubs in urban areas.^{11,12} Despite multiple studies demonstrating the high prevalence of commercial sponsorship in junior sports and its adverse impacts on children's awareness of, attitudes to and purchase intentions for unhealthy brands and products,^{13–15} limited research has focused on ways to support a transition towards healthier sponsorship models using qualitative research.¹⁶ In addition to this, most Australian studies that have focused on understanding the extent of unhealthy sports sponsorship were conducted approximately a decade ago.^{17–20} To inform comprehensive policy advocacy and policy actions, timely and up-to-date evidence is required. This is particularly important in Australia where policies to restrict unhealthy food marketing to children are now being discussed by federal politicians.²¹

To reduce unhealthy sponsorship of junior sports, it is important to understand and address more recent and context-specific perceptions of sponsorship practices, including barriers and enablers to transitioning towards healthier sponsorship models.^{22,23} Whilst some studies indicate that adverse financial impacts are a key barrier for administrators to reduce unhealthy sponsorship across all sports levels,^{19,22} club officials' experiences of unhealthy food and beverage sponsorship in junior sports have not been explored in depth. Such research is needed to help us understand the real-world feasibility of implementing actions to address unhealthy sponsorship practices in this context. This study aimed to explore parents' and club officials' engagement with, and attitudes towards, the sponsorship of junior sports by unhealthy food and beverage companies (herein simplified to 'unhealthy food sponsorship') in Victoria, Australia—with a view to inform up-to-date policy recommendations.

Methods

Study design

Qualitative and quantitative data on attitudes to, and engagement with, unhealthy food sponsorship in junior Victorian sports were obtained from samples of parents (cross-sectional survey) and club officials (in-depth qualitative interviews). Data were collected between March and December 2020.

Context

Victoria is the second most populous state in Australia. Each local Victorian community generally has access to a diverse range of sports,

varying from amateur to professional levels and in size (i.e. the number of users). Almost all junior sporting clubs are run by volunteers, and users pay a fee to participate in their chosen sport.

Parent surveys

Sampling: An external company (Qualtrics) was appointed to distribute our online survey to a convenience sample of Victorian parents whose children were participating in sports. Qualtrics recruited participants from multiple online panel providers that consisted of people who have agreed to be contacted for research purposes. Participants receive points for participating in research, which are linked to a rewards system that is operated by the panel provider. A target sample of 500 survey responses was identified as adequate based on the exploratory nature of this research and previous studies.^{12,20}

Data collection: The self-completed parent survey included questions on demographic characteristics, the number and type of sports their child(ren) were engaged in and awareness of, attitudes towards and engagement with food company sponsorship in children's sports. Food company sponsorship was defined using examples of the multinational franchise or local independent, fast-food companies. Gambling and alcohol sponsorship were included in the survey as comparator categories. [Table S1](#) includes all survey questions and response options. Surveys typically took 10–20 minutes to complete.

Data management and analysis: Incomplete and invalid survey responses (e.g. responses from people with no children) were removed by Qualtrics and cross-checked by the research team. Quantitative data were analysed in Stata 16 (StataCorp LLC) using descriptive statistics. Data are presented in aggregate and collapsed to 3-point Likert scales. Stratified findings by socio-demographic characteristics (area-level disadvantage, urban/regional, education and sex) are comprehensively reported in [Tables S2–S6](#). χ^2 tests were used to identify significant differences in survey responses between socio-demographic groups. Responses to open-ended questions were inductively coded and thematically analysed.

Club official interviews

Sampling: Between February and December 2020, club officials were recruited from both urban and regional areas across four of the most commonly played junior sports in Victoria (soccer, Australian rules football, netball and cricket²⁴) to participate in in-depth interviews. Clubs were purposefully sampled from those that were known to receive unhealthy food sponsorship (identified from a random audit of publicly available sponsorship information¹¹). We chose to focus on these clubs as their experiences were likely to enable us to explore the barriers and enablers to removing food company sponsorship in depth. Clubs were contacted to participate in this study via email or phone, with invites only extended to club officials that were familiar with the club's sponsorship procurement processes (e.g. the club president, sponsorship coordinator).

Data collection: One-on-one, semi-structured interviews (of approximately 45 min) were conducted by the research team (CZ and FM) over the phone (n=15) or in person (n=1 prior to the coronavirus disease 2019-related lockdowns). Interview questions covered the official's role within the club, club characteristics (e.g. members' age distributions, annual club income/membership numbers to indicate the size of clubs), sponsorship procurement procedures (i.e. general

process, the number of club sponsors, revenue from sponsors, marketing opportunities for sponsors), financial reliance on food company sponsors, club's attitude towards unhealthy food sponsorship and barriers and enablers to shifting towards healthier sponsorship models (Table S7).

Data analysis: Interviews were audio recorded, transcribed semi-verbatim and thematically analysed. Participants were given the opportunity to review and comment on interview transcripts. Braun and Clarke's approach to thematic analysis (2006) was used,²⁵ with line-by-line inductive coding conducted in NVivo version 12 (QSR International Pty Ltd). The generation of initial codes and themes was led by one member of the research team (CZ), iteratively guided by ongoing discussions with a second member (KB). All researchers reviewed and confirmed the final themes.

Results

Parent surveys

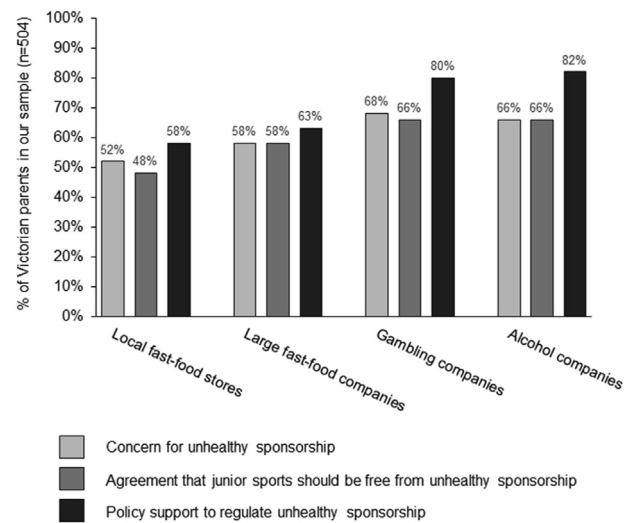
Sample characteristics: A total of 504 Victorian parents with children in sports clubs provided eligible survey responses (out of 2834 total responses). There was a fairly even split of parents by sex (49% female), and 75% were from urban areas (25% from regional areas). Approximately two-thirds (67%) of parents had university degrees, 20% had completed certificates/diplomas and 13% indicated that secondary school was their highest education level. The median age of the parents' children was 10 years (interquartile range: 7–12 years). Of the parents sampled, 41% reported that their children played Australian rules football, with soccer (26% of parents), cricket (20%), netball (17%) and basketball (8%) also commonly reported to be played.

Parents' perceived extent of unhealthy food sponsorship practices: Forty-five percent of parents reported 'yes' to indicate that their child's sport club received unhealthy food sponsorship. Player rewards were the most frequently reported form of sponsorship (by 24% of parents), followed by logos on uniforms (by 17% of parents) and signage (by 18% of parents). The majority of the sample (from 56% for signage to 62% for sports rewards) agreed that each of the different forms of sponsorship influenced children's food and beverage preferences (Table S5).

Half (51%) of the parents indicated (i.e. answered 'yes') that their child had received a sports reward from a large fast-food company. This was lower for local fast-food companies (42%). Most parents reported that the reward was used, either by their child (39%) or family (35%), compared to 18% reporting that the reward was not used and 7% not remembering how it was used. Approximately two-thirds (65%) of parents indicated that they spent more than the reward amount at the sponsor's food outlet. Rewards were seen to be important for sports participation according to at least half of the parents. Whilst 55% of parents thought that using sponsorship to provide rewards was appropriate, nearly two-thirds of all parents (65%) agreed that sports rewards should be healthy.

Parents' concern for children's exposure to unhealthy food sponsors: Figure 1 shows how most parents were concerned (extremely/very/moderately) about children's exposure to junior sports sponsorship by unhealthy companies (58% for local fast-food, 63% for large fast-food, 80% for gambling and 82% for alcohol companies). Concern for sponsorship by large fast-food companies and local fast-food companies was higher for parents in higher than in lower socioeconomic areas, in urban than in regional areas and with higher

Figure 1: The percentage of Victorian parents in our sample (n=504) who indicated concern for unhealthy sponsorship of junior sports.



than with lower levels of education (all, $p < 0.05$; see Tables S2 for survey results according to area-level disadvantage, region, sex and education). The only group that did not show majority concern (39% were extremely/very/moderately concerned) for large fast-food sponsorship of junior sports was parents with the lowest education levels. Groups that did not show majority concern for local fast-food sponsorship were parents with secondary school and diplomas as their highest education levels (26% and 41%, respectively), females (48%), people in regional areas (46%) and people in the fourth most advantaged area (38%).

In response to open-ended questions on reasons for their level of concern about unhealthy food sponsorship, parents who reported little concern noted that this was because (1) food consumption was perceived as a matter of individual choice; (2) unhealthy food was seen as an acceptable treat; (3) the ubiquitous nature of unhealthy foods and advertising trivialised sponsorship concerns and (4) sports clubs needed to generate enough revenue to operate. In contrast, parents expressing concern for unhealthy food sponsorship recognised its negative influence on children's food preferences and misalignment with the health promotion value of sport.

Parents' attitudes to transitioning towards healthier sponsorship of junior sports: When asked about adopting policies to restrict unhealthy food sponsorship, 50% of parents strongly or somewhat agreed that junior sports should be free from unhealthy sponsors (Table S5). Fifty-eight percent strongly/somewhat agreed that junior sports should be free from sponsorship by large fast-food companies, with a lower agreement for removing sponsorship from local fast-food stores (48% of parents strongly or somewhat agreed) and higher agreement for removing sponsorship from gambling and alcohol companies (66% of parents strongly or somewhat agreed; see Figure 1). Sixty percent of parents agreed (strongly or somewhat) that they would prefer it if children's sports uniforms did not have unhealthy food logos and if player rewards were not associated with unhealthy foods. Similarly, 63% of parents agreed (strongly or somewhat) that they would prefer it if sports clubs were only affiliated with sponsorship that aligns with good health and 67% agreed

(strongly or somewhat) that healthy sponsorship practices aligned with the values of their family.

Figure 1 shows how 58% of parents supported (strongly or somewhat) the introduction of club or sporting body policies to regulate sponsorship of junior sport by large fast-food companies, with lower support for local fast-food companies (52%) and higher support for regulations restricting sponsorship by gambling (68%) and alcohol companies (66%). Fifty-six percent of parents supported club policies to reduce all types of unhealthy sponsorship in junior sports. With the exception of alcohol companies, support for policies to regulate unhealthy sponsorship was highest among parents with the highest levels of education (Table 1). A higher percentage of parents (63% of parents) indicated that clubs had a responsibility for regulating unhealthy sponsorship, than local governments (53%), state governments (47%), sporting organisations (47%), the federal government (31%) and sponsors (28%).

Whilst 64% of parents strongly or somewhat agreed that they were concerned about the potential negative (financial or other) impacts for junior sports clubs if they stopped accepting unhealthy food sponsorship, 43% of parents indicated that they would be willing to pay higher fees so that their child was not exposed to unhealthy food sponsorship (median nominated additional cost parents were willing to pay: A\$ 50, interquartile range: \$20-200). A greater percentage of parents with the highest (60% of parents with postgraduate degrees) compared to the lowest levels of education (20%) were willing to pay higher fees (Table 1).

Club official interviews

Club official characteristics: In-depth interviews were conducted with 16 club officials (n=12 junior sports club presidents, n=2 secretaries, n=1 sponsorship coordinator, n=1 treasurer, n=4 women, n=8 regional and n=8 urban clubs) from 16 Victorian sports clubs that accepted unhealthy food sponsorship. Club officials represented Australian rules football (n=4), Australian rules football and netball (n=5), soccer (n=3), netball (n=2), cricket (n=1) and cricket and Australian rules football (n=1) clubs. The number of players reported to be registered per club varied from 70 to 1000, including 70 to 550 junior players. The reported total number of club sponsors varied from four to 70 (collectively contributing between A\$4,000 and A\$200,000 in funding each year; 5–60% of the club's total estimated annual revenue; with food sponsors contributing A\$500 to A\$10,000 each year). This variation in sponsorship was often explained by differences in sports club funding models, types of sports (i.e. higher for Australian rules football and soccer) and type of club (e.g. shared sponsorship with senior sports clubs, especially those with semi-professional male teams, attracted more sponsorship funding than smaller regional and predominantly female sports clubs). Victorian club officials' attitudes to, and engagement with, unhealthy food sponsorship are summarised below.

Funding challenges for junior sports

Funding options are limited for junior sports: Junior sports club officials indicated that their main objective was to deliver sport that was accessible to community members. To enable and optimise sports participation, junior clubs seldom operated to generate profits but reported being desperate for money, making sponsorship a vital income source. For one participant:

Sponsorship is what keeps your club afloat. Without the sponsorship your club is going to sink pretty fast. (Club official 3, Australian rules football and netball club sponsorship and community engagement manager, urban Victoria)

Club officials indicated that money was needed to pay the bills (i.e. registration fees with sports organisations, insurance, ground lease, utilities and maintenance), to pay for uniforms and equipment and, in some instances, to pay coaches and semi-professional players. In addition to sponsorship, clubs generated income through registration fees, canteen and bar sales and fundraisers. Some larger clubs with successful senior teams also generated income from ticket or merchandise sales, or by hosting tournaments. Overall, there was notable heterogeneity in club funding models.

Whilst there was high awareness of the availability of government grants, club officials perceived these to be difficult to obtain and unreliable income sources, being dedicated to specific projects (e.g. promoting female sports participation) and requiring skilled personnel and time to prepare (which are limited in volunteer-run clubs). State and national sporting organisations were not viewed as an income source for junior sports clubs. Club officials explained how they paid registration fees to sports organisations and, in return, were supported by the provision of administrative support, equipment and product discounts.

Junior sports sponsorship is community dependent

Community networks and long-term relationships are key: Community networks were the main avenue used to identify sports club sponsors, usually through parents of junior players or past members who own a business. Active sponsorship recruitment processes (i.e., cold calling) were used to a lesser extent as they were perceived to be less effective and more time-consuming than engaging existing networks. Long-term relationships with sponsors were desired, although this commitment was perceived to be difficult to achieve without a direct business connection.

Club officials perceived fast-food businesses to be integral to the community. One interviewee justified large fast-food companies as sponsors by describing how they provide children in the community with important job opportunities:

...we are trying to keep businesses local – a lot of these local businesses – Krispy Kreme, Subway – actually employ kids in the community to work for them. So, if they're there and we're supporting them, they're helping our kids off the street by providing them with jobs. (Club official 5, netball club president, urban Victoria)

Quid pro quo sponsorship negotiations: All club officials reported that clubs offer pre-specified sponsorship packages or negotiated deals, with individual sponsors contributing between a few hundred dollars and A\$20,000. Interviewees conveyed concern for ensuring that they adequately repay and express gratitude to sponsors, usually by marketing and increasing community exposure to their businesses:

...they're [sponsors are] very much in the driver's seat here, which is how it should be. It's about what their needs are. They won't come on board – or if you do manage to get them for one year, you'll lose them the next... [if] they don't see value for themselves. (Club official 6, cricket club president, regional Victoria)

Table 1: Extent to which parents agree that children’s sports clubs and their governing bodies should develop policies to regulate unhealthy food sponsorship according to sponsorship type and socio-demographic characteristics.

Overall, % (n=504)	Area-level disadvantage					Region		Sex		Education					
	Q1, % (n=46)	Q2, % (n=74)	Q3, % (n=83)	Q4, % (n=85)	Q5, % (n=215)	Urban, % (n=380)	Regional, % (n=124)	Female, % (n=250)	Male, % (n=254)	Secondary school, % (n=65)	Diploma, % (n=49)	Certificate III/IV, % (n=48)	Bachelor degree, % (n=168)	Postgraduate degree, % (n=174)	
How much do you agree or disagree that children's sports clubs and their governing bodies should develop and adopt policies to reduce the impact of unhealthy sponsorship?															
A) Large fast-food companies															
Strongly agree	27	20	23	28	18	33	28	23	22	32	12	20	19	25	39
Somewhat agree	31	50	28	25	26	33	32	28	33	30	20	27	35	40	28
Neither agree nor disagree	26	20	30	27	34	23	25	31	30	23	43	41	31	23	17
Somewhat disagree	10	9	12	17	13	7	10	10	9	12	14	6	15	10	10
Strongly disagree	4	2	7	2	7	3	4	5	4	4	9	4	0	<1	6
Don't know	1	0	0	1	2	1	<1	2	2	0	2	2	0	2	<1
				* <i>p</i> =0.029			<i>p</i> =0.422		* <i>p</i> =0.013		* <i>p</i> <0.001				
B) Local fast-food stores															
Strongly agree	16	20	11	17	9	20	18	13	13	20	6	16	10	15	24
Somewhat agree	35	39	34	33	31	42	36	32	32	39	14	22	46	42	37
Neither agree nor disagree	28	26	35	33	31	23	29	27	33	23	45	39	23	29	20
Somewhat disagree	13	11	15	18	16	8	11	19	12	13	23	14	15	10	10
Strongly disagree	6	2	5	10	11	4	6	7	7	6	11	6	4	3	8
Don't know	2	2	0	1	4	1	1	2	3	0	2	2	2	2	1
				* <i>p</i> =0.017			<i>p</i> =0.176		* <i>p</i> =0.002		* <i>p</i> <0.001				
C) Alcohol companies															
Strongly agree	42	39	38	43	44	44	42	44	45	40	43	35	48	45	40
Somewhat agree	24	20	23	27	20	26	25	19	23	25	18	31	19	22	27
Neither agree nor disagree	15	20	15	14	20	13	15	15	13	17	20	12	19	14	14
Somewhat disagree	8	13	7	7	4	8	8	6	6	9	8	8	4	7	9
Strongly disagree	10	9	18	6	12	8	9	14	10	9	9	10	6	11	10
Don't know	1	0	0	2	1	1	1	2	2	0	2	4	4	<1	0
				<i>p</i> =0.594			<i>p</i> =0.506		<i>p</i> =0.079		<i>p</i> =0.568				
D) Gambling companies															
Strongly agree	49	46	41	51	47	53	50	47	49	49	48	41	50	50	51
Somewhat agree	19	20	20	22	20	17	20	17	18	20	14	29	19	18	20

(continued)

TABLE 1. Continued

	Overall, % (n=504)	Area-level disadvantage					Region		Sex		Education				
		Q1, % (n=46)	Q2, % (n=74)	Q3, % (n=83)	Q4, % (n=85)	Q5, % (n=215)	Urban, % (n=380)	Regional, % (n=124)	Female, % (n=250)	Male, % (n=254)	Secondary school, % (n=65)	Diploma, % (n=49)	Certificate III/IV, % (n=48)	Bachelor degree, % (n=168)	Postgraduate degree, % (n=174)
Neither agree nor disagree	13	17	16	11	16	11	12	16	14	13	20	12	15	14	10
Somewhat disagree	7	11	8	7	2	8	8	6	6	8	9	4	6	7	8
Strongly disagree	10	7	15	6	13	9	9	13	11	9	8	12	4	10	11
Don't know	1	0	0	4	1	2	1	2	2	<1	2	2	6	1	0
		<i>p</i> =0.547					<i>p</i> =0.598		<i>p</i> =0.700		<i>p</i> =0.322				
E) All of the above															
Strongly agree	24	24	22	29	18	25	24	24	23	24	15	24	19	24	28
Somewhat agree	27	33	24	14	22	33	29	19	26	28	14	10	27	30	33
Neither agree nor disagree	26	26	24	33	33	20	25	27	28	24	37	31	31	28	17
Somewhat disagree	9	9	5	6	7	11	10	5	6	11	11	8	4	8	10
Strongly disagree	6	7	9	8	6	4	6	7	6	6	5	8	2	4	9
Don't know	9	2	15	10	14	7	7	17	12	7	18	18	17	7	6
		<i>*p</i> =0.026					<i>*p</i> =0.003		<i>p</i> =0.158		<i>*p</i> <0.001				
Would you like your club to develop and adopt a policy about the types of sponsorship they receive which rejects any form of unhealthy food sponsorship?															
Yes	56	63	47	45	41	67	59	46	49	62	26	41	42	62	68
No	23	24	24	33	33	14	22	25	26	20	45	27	19	21	16
Don't know	22	13	28	23	26	20	19	29	26	18	29	33	40	17	16
		<i>*p</i> <0.001					<i>*p</i> =0.029		<i>*p</i> =0.010		<i>*p</i> <0.001				
Would you be willing to pay more for your membership fees if your child is not exposed to unhealthy food and drink advertising?															
Yes	43	48	39	28	31	54	32	54	32	54	20	22	29	45	60
No	34	26	42	43	38	28	41	27	41	27	52	39	35	32	27
Don't know	23	26	19	29	32	18	27	19	27	19	28	39	35	23	13
		<i>*p</i> <0.001					<i>p</i> =0.167		<i>*p</i> <0.001		<i>*p</i> <0.001				

**χ*² tests were used to test associations between levels of agreement and socio-demographic characteristics (significance level set at *p*<0.05).

The extent of this exposure and the way in which the sponsorship deal was reciprocated were dependent on the monetary amount provided by sponsors. Sponsor brands were commonly advertised through outdoor ground signage, logos on sports uniforms and social media (targeted towards club members). To a lesser extent, sponsors were advertised through newsletters, websites and events. According to one club official:

There's logos on our playing jumpers, on our shorts, on our training attire, there's logos on our warm-up gear for both football and netball, there's logos on our supporter's wear, polo shirts, that kind of stuff. We're all walking billboards. (Club official 1, football and netball club president, regional Victoria)

Perceived risk of unhealthy food sponsorship is low

Money and sports rewards in exchange for brand marketing: Club officials described how sports clubs likely got more out of sponsorship deals than sponsors, perceiving sponsor support to be more valuable than the marketing that clubs provided. Although money was the preferred sponsorship type for junior sports clubs, club officials reported that player rewards (e.g. fast-food vouchers) were increasingly used. Approximately half of the interviewees identified that their club received player rewards from McDonald's, with several indicating that they received monetary contributions and equipment from McDonald's. Player rewards were perceived as an incentive for children to participate in sport and a way to please parents by providing them with more value for money for their registration fees. It was also indicated that children are exposed to unhealthy food advertising in the broader community, thus trivialising concerns about unhealthy food sponsorship in junior sport.

I probably haven't got a view on it [unhealthy food sponsorship] really because every club or organisation has to survive somehow and we've got to have money to make it all go round. It's [removing unhealthy sponsors is] not going to stop kids and families going and buying it [unhealthy food]... From a two-year-old kid they soon know what the Maccas sign is. (Club official 13, Australian rules football club president, urban Victoria)

Some of the club officials perceived targeted marketing of unhealthy food industries through junior sports sponsorship to be problematic. Rewards such as vouchers were thought to result in families purchasing more than the monetary value of the vouchers—thereby increasing sales for food companies.

Compared to unhealthy food sponsorship, gambling, alcohol and tobacco sponsorship were more consistently of concern to club officials. Interviewees indicated that existing legislation, public will and public awareness supported health concerns around gambling, alcohol and tobacco—but were lacking with respect to unhealthy foods and beverages and their marketing.

The only thing I can put it down to is because... you can't be a minor and drink alcohol, and you can't be a minor and have a punt [bet on sports], but you can be a minor and have a Domino's pizza. So if they turned around and said no one under 16 - like with a packet of smokes or whatever it is - no one under 16 can have this, or, no one under 16 can purchase a Domino's pizza, people would go, 'Oh, we're in trouble [this is unacceptable], we can't have that.' (Club official 15, Australian rules football club president, regional Victoria)

Parents are perceived to be responsible for children's food choices: Interview participants unanimously stated that parents and club members had not raised concerns about having unhealthy sponsors

at their children's clubs. This low level of public concern for unhealthy food sponsorship (and marketing more broadly) was reported because unhealthy food was seen as an acceptable treat and parents were held responsible for regulating what they consume.

I've got no issues [with unhealthy food sponsorship], it's up to the parents I guess really to police it to be honest. (Club official 2, Australian rules football and netball club treasurer, urban Victoria)

External support is required to transition towards healthier junior sports sponsorship

Lack of junior sports club sponsorship policies: When making decisions about sponsorship, most clubs did not have formal criteria governing their choice of sponsors, including food companies. Club officials generally thought that junior clubs could not afford to turn away money, and thus, decisions were commonly made via board/committee discussions. Whilst health concerns were not explicitly identified in any sponsorship procurement criteria, some club officials explained how it was common sense not to accept sponsorship from some industries that were overtly inappropriate for children (e.g. alcohol, gambling, tobacco and sex)—but had not encountered such situations. In the few instances where clubs identified criteria prohibiting unhealthy sponsorship (usually alcohol) of junior sports, decisions were guided by the 'Good Sports' accreditation program,²⁶ grant application criteria or government legislation prohibiting large businesses in their regional township.

Alternative sponsorship and funding models: Most club officials suggested that they would not accept unhealthy food sponsorship if there was an alternative income stream. Nonetheless, the feasibility of replacing unhealthy sponsors was questioned in terms of adequacy (i.e. concerns over the potential to financially disadvantage clubs), sustainability (over multiple years) and equity (distribution across clubs). Applying for new/alternative grant schemes aiming to replace unhealthy sponsors also needed to be feasible for volunteers (who have limited time and potentially limited skills).

Just from a business point of view, if you've got McDonald's, they're sponsoring a club for \$5000 and the grant's only going to get \$1000, it's probably not going to be the right thing [for the club, financially, to reject the sponsorship]. (Club official 2, Australian rules football and netball club treasurer, urban Victoria)

Increasing membership or registration fees to generate enough revenue to replace unhealthy food sponsors was also perceived unfavourably by clubs—with increased membership fees viewed as negatively impacting sports participation. As such, clubs aimed to keep fees as low as possible.

[Our membership fees are] already reasonably high relative to our other clubs in our area, so probably our primary aim is to keep them as low as we can to enable participation. I think if we were sort of reducing participation with the idea of promoting healthier choices, well sport's a healthy choice too. (Club official 6, cricket club president, regional Victoria)

Another barrier to reducing unhealthy food sponsorship in junior sports was the perceived lack of healthy reward alternatives and healthy businesses that were interested in sponsoring clubs.

High-level support is essential: Club officials indicated that high-level support from sports organisations, elite sports leagues, government and non-government organisations would be required to invest more resources in grassroots sports and lead a transition towards healthier sponsorship of junior sports. The need for

government regulation to prohibit unhealthy sports sponsorship and to support sustainable funding models for junior sports was discussed to a lesser extent.

Discussion

This study found that most parents thought junior sports should be free from unhealthy food sponsorship (as well as alcohol and gambling sponsorship). Forty-five percent of parents indicated that their child's sports club received some form of unhealthy food sponsorship. Unhealthy player rewards (namely, food vouchers) were perceived as particularly prevalent and influential by parents and club officials. Whilst most parents supported policies and actions to reduce unhealthy sponsorship in junior sports, club officials expressed several barriers to such actions. With junior sports clubs described as 'desperate for money', high-level support from sports associations, non-governmental organisations (particularly state-level health promotion bodies and those focused on improving public health) and governments was thought to be necessary to establish standards that support healthier sponsorship models and funding streams that are adequate, sustainable and equitable.

Concern for unhealthy food sponsorship in junior sports

Most parents surveyed indicated some level of concern for unhealthy food sponsorship in junior sports (58% of parents for local fast-food stores and 64% of parents for large fast-food companies). This aligns with previous findings obtained from 2224 Victorians across elite, adult and junior sports club members in 2018.²⁷ In that study, 60% of the sample were very concerned or concerned about unhealthy food sponsorship in junior sports (measured using a 4-point Likert scale, compared to a 5-point Likert scale in our study).²⁷ Our study extends these findings by revealing that a higher percentage of parents answered that sports rewards were slightly/somewhat/very influential compared to all other forms of sponsorship. Club officials and parents observed how unhealthy sports rewards have the potential to increase the amount that families spend at fast-food stores. Despite this concern, these rewards were often seen as important to motivate children to participate in sports. A commercial determinant of the health lens highlights the underlying profit-driven motives of rewards schemes, which are ultimately marketing unhealthy products to children and a corporate responsibility strategy.²⁸ The problematic nature of such schemes is exacerbated by their displacement of direct financial contributions to sports clubs. As such, it will be important that future research and practice seek to understand how junior sports clubs can adopt and implement healthy sports rewards programs.

Support for regulating unhealthy sports sponsorship

Most parents in our sample supported the introduction of policies by clubs and sports' governing bodies to regulate large (58% of parents) and local (52% of parents) fast-food companies. Parents were more likely to agree that local, compared to federal, governments (53% vs. 31% of parents) had a responsibility to regulate unhealthy sponsorship of junior sports (the feasibility of which is discussed below). In 2017, a cross-sectional survey of a representative Australian sample (n=3767) indicated that the percentage of adults who support 'restrictions on sponsorship of sporting events and teams by multinational food companies' (40%) was lower than all 12 other

national food policy options that were examined.²⁹ These findings were also reiterated by a 2021 survey of 2200 Australian adults in which 39% were found to support restrictions on sponsorship by companies that sell unhealthy foods and beverages.³⁰ An older telephone survey (n=825) conducted in New South Wales in 2011 found that 76% of parents supported restricting unhealthy food and beverage sponsorship in sports, with no differences across socio-economic areas.¹⁹ Multiple factors may have contributed to the lower levels of support that we identified among Victorian parents in 2020 than among parents in New South Wales in 2011. First, our online survey may be less prone to reporting bias than telephone surveys. Second, there may be regional differences in parent attitudes to sports sponsorship (which may be associated with different types of sports participation and engagement). Third, the extent of sports sponsorship may have increased across all sports levels, thereby increasing the perceived acceptability of it over the last decade.

In our study, a higher percentage of parents supported policy actions by clubs and sports' governing bodies to regulate sponsorship by gambling (68%) and alcohol (66%), compared to unhealthy food companies. These attitudes were reinforced by club officials and align with previous findings among a sample of Australian rules football club members in Victoria and New South Wales (n=376) and parents with children in junior sports in New South Wales (n=825).¹² In this latter study, Gonzalez et al. also found that support for regulating unhealthy food sponsorship in junior sports was approximately half of that for alcohol sponsorship (42% vs. ~80% of respondents).¹² Moreover, our research parallels the finding by the Australian Foundation for Alcohol Research and Education that 66% of parents support regulating alcohol advertising during professional sports games.³¹

Barriers to regulating unhealthy sports sponsorship

Despite most parents supporting actions to prohibit unhealthy food sponsorship, our research contributes several challenges to action as perceived by club officials. These included the dearth of high-level responsibility and leadership relating to actions that curb unhealthy sponsorship practices, including by clubs, sports organisations and governments. Junior sports clubs also have unstable funding models and are primarily concerned about having adequate funds to continue their operations and optimise sports participation. Furthermore, sponsorship (even by large fast-food companies) was also perceived through the lens of community businesses supporting community sports and vice versa. Similar barriers to healthier sponsorship models were mapped in a previous study with 29 junior and elite sports officials—which reported 33 barriers relating to four constructs (listed in order of importance, from most to least): financial viability, 'junk food' being easy to sell at sports clubs, community attitudes and values and organisational capability.²² Our findings add depth to these constructs and, in part, reflect the broader qualitative literature exploring barriers to reducing children's sugary beverage consumption³⁴ and childhood obesity.³⁵

Indeed, the perceived risks of marketing harmful products appeared to be low in the community, with parents held responsible for children's food choices and 'junk food' considered an acceptable treat. This aligns with existing evidence that demonstrates how dominant public discourses around food and obesity tend to be focused on individual responsibility, consequently diverting attention away from societal and policy-level actions.³² Systems mapping and

other forms of participatory research have been shown to shift the public dialogue on nutrition issues (including between parents, children, sports organisations and policymakers) and should continue to be used across communities.³³ Engaging communities in this way can ultimately increase civil demand for public health policies that target the commercial and economic determinants of children's health.³³

Further research is required to understand how each of these perceived barriers can be addressed to facilitate a transition towards healthy sports sponsorship models in the real world. To address concerns about the financial viability of removing unhealthy sponsors from junior sports, our interviewees indicated that any individual sponsor does not contribute more than \$A 20K per year, with most unhealthy food sponsors contributing in the region of a few thousand dollars per year (which can often constitute a low percentage of total revenue; results not quantitatively analysed). Thus, the financial impact associated with removing unhealthy food sponsorship may be relatively small for some clubs, although this requires more in-depth exploration. Importantly, other policy options designed to restrict children's exposure to the marketing of unhealthy food on TV have been found to be cost-effective (total cost-savings of \$A 91M over the lifetime) in the Australian context given their likely substantial health benefits.³⁶ In the same vein, the removal of sports sponsorship—a popular form of unhealthy food marketing—would likely provide population health benefits.

Any adverse impacts of removing particular types of sponsors could also be mitigated through subsidies by governments or elite sporting leagues or alternative sports funding schemes that involve healthier sponsors (e.g. non-governmental organisations, sporting brands/technology, telecommunication companies, etc.). Such actions are likely to necessitate investment in the state- or federal-level government policies to support better centralisation and more equitable distribution of funds to local sports clubs. Such initiatives could include equity and commercial conflict of interest criteria in their community sports grants. For example, the Victorian Health Promotion Foundation (VicHealth; an independent government-funded statutory body) was funded in 1987 by the state's hypothecated tobacco tax and was legislated to provide at least 30% of its annual funds to sports bodies.³⁷ Although most local governments are likely to be limited in their ability to adopt and implement policies to restrict unhealthy food sponsorship, they can be key facilitators of on-the-ground change—as demonstrated by their existing involvement in state-level health promotion efforts.³⁸ The overall feasibility, acceptability, affordability and value for money of various alternate funding models warrant further investigation.³⁶

Strengths and limitations

Our survey identified important views of Victorian parents, which were complemented by an in-depth interview exploration into the perspectives of sports clubs on unhealthy food sponsorship across various sports and demographics. For example, we unpacked why parents and clubs may or may not support a transition towards healthier sponsorship practices. In an effort to minimise potential biases in our survey responses, our community-based parent sample was selected to be a representative in terms of sex and regional/urban locality and only included parents of children in sport. Our club representatives were, however, limited to predominantly males (n=12) in male-dominated junior sports clubs (n=2 netball clubs and

n=4 netball/football clubs) that accepted unhealthy food sponsorship. Additional research may be required to understand the transferability of our findings to other contexts, including predominantly female sports and other geographic locations. Moreover, future research could explore similarities and differences in our interview findings among sports clubs that have decided not to accept unhealthy sponsors.

Finally, over the duration of this study, the Victorian government implemented extended state-wide lockdowns in response to the coronavirus disease 2019 pandemic. The lockdowns lasted approximately five months and interrupted junior sports, with most clubs cancelling their 2020 seasons. Uncertainties in the sports funding and playing environment may have influenced responses, and disruptions to daily life may have affected parent survey completion rates.

Conclusions

Junior sports should provide children with health-promoting environments. Yet, current sponsorship arrangements in Australian junior sports promote a range of unhealthy products. To ensure that junior sports sponsors serve to promote, rather than undermine health, a coherent approach is needed to address the influence of the unhealthy food, alcohol and gambling industries. This study shows that there is considerable parent support for restricting unhealthy food sponsorship in junior sports. Shifts towards healthier food and beverage sports rewards may represent the first key target for supporting clubs to move away from unhealthy food sponsorship. However, transitioning towards healthier sponsorship in junior sports was reported as being hindered by the absence of sufficient, sustainable and equitable funding for junior sports clubs and low concern for such actions by community leaders. Strong leadership and policy action from high-level sporting associations and governments are likely to be necessary to reduce unhealthy food sponsorship related to junior sports, alongside restrictions on the marketing of unhealthy food through other media and settings.

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Ethics approval and consent to participate

All parents and club officials provided informed consent to participate in this study. The study received approval from the Deakin University ethics committee [project ID HEAG-H 142_2019].

Author contributions

KB, FM, TH, JP, and MC conceptualised and led the design of this study. CZ led data collection, data analysis and preparation of the manuscript. GS, AC, and JA provided critical feedback on the study design and results, including reviewing and editing multiple versions of the manuscript.

Consent for publication

All participants consented to the results being published.

Availability of data and material

Available upon request.

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Conflicts of interest

The authors have no competing interests to declare.

References

- Obesity and overweight. *Global health observatory. World health organization*. 2021 [updated 09/06/2101/07/21]. Available from, <https://www.who.int/news-room/fact-sheets/detail/obesity-and-overweight>.
- Australian Institute of Health and Welfare. *Australia's children. Cat. no. CWS 69*. Canberra: AIHW; 2020.
- Swinburn BA, Sacks G, Hall KD, McPherson K, Finegood DT, Moodie ML, et al. The global obesity pandemic: shaped by global drivers and local environments. *Lancet* 2011;**378**(9793):804–14.
- Clark H, Coll-Seck AM, Banerjee A, Peterson S, Dalglish SL, Ameratunga S, et al. A future for the world's children? A WHO-UNICEF-Lancet Commission. *Lancet* 2020;**395**(10224):605–58.
- WHO. *Set of recommendations on the marketing of foods and non-alcoholic beverages to children*. World Health Organization; 2010.
- Cornwell TB, Weeks CS, Roy DP. Sponsorship-linked marketing: opening the black box. *J Advert* 2005;**34**(2):21–42.
- Sartori A, Stoneham M, Edmunds M. Unhealthy sponsorship in sport: a case study of the AFL. *Aust N Z J Publ Health* 2018;**42**(5):474–9.
- Watson WL, Brunner R, Wellard L, Hughes C. Sponsorship of junior sport development programs in Australia. *Aust N Z J Publ Health* 2016;**40**(4):326–8.
- Chambers T, Sassi F. Unhealthy sponsorship of sport. *BMJ* 2019;**367**:i6718.
- United Nations Children's Fund and United Nations Special Rapporteur on the Right to Food. *Protecting children's right to a healthy food environment*. Geneva: UNICEF and United Nations Human Rights Council; November 2019.
- Martino F, Chung A, Potter J, Heneghan T, Chisholm M, Riesenber D, et al. A state-wide audit of unhealthy sponsorship within junior sporting clubs in Victoria, Australia. *Publ Health Nutr* 2021;1–8.
- Gonzalez S, Kingsland M, Hall A, Clinton-McHarg T, Lecathelinais C, Zukowski N, et al. Alcohol and fast food sponsorship in sporting clubs with junior teams participating in the 'Good Sports' program: a cross-sectional study. *Aust N Z J Publ Health* 2020;**44**(2):145–51.
- Kelly B, Baur LA, Bauman AE, King L, Chapman K, Smith BJ. "Food company sponsors are kind, generous and cool": (Mis)conceptions of junior sports players. *Int J Behav Nutr Phys Activ* 2011;**8**(1):95.
- Pettigrew S, Rosenberg M, Ferguson R, Houghton S, Wood L. Game on: do children absorb sports sponsorship messages? *Publ Health Nutr* 2013;**16**(12):2197–204.
- Bragg MA, Roberto CA, Harris JL, Brownell KD, Elbel B. Marketing food and beverages to youth through sports. *J Adolesc Health* 2018;**62**(1):5–13.
- Dixon H, Lee A, Scully M. Sports sponsorship as a cause of obesity. *Curr Obes Rep* 2019;**8**(4):480–94.
- Kelly B, Baur LA, Bauman AE, King L, Chapman K, Smith BJ. Food and drink sponsorship of children's sport in Australia: who pays? *Health Promot Int* 2011;**26**(2):188–95.
- Kelly B, Baur LA, Bauman AE, Smith BJ, Saleh S, King LA, et al. Role modelling unhealthy behaviours: food and drink sponsorship of peak sporting organisations. *Health Promot J Aust* 2011;**22**(1):72–5.
- Kelly B, Baur LA, Bauman AE, King L, Chapman K, Smith BJ. Views of children and parents on limiting unhealthy food, drink and alcohol sponsorship of elite and children's sports. *Publ Health Nutr* 2013;**16**(1):130–5.
- Kelly B, Baur LA, Bauman AE, King L, Chapman K, Smith BJ. Restricting unhealthy food sponsorship: attitudes of the sporting community. *Health Pol* 2012;**104**(3):288–95.
- Gavanescu D. *Intouch Public Health. Public Health Association of Australia*. Available from, <https://intouchpublichealth.net.au/independent-mp-dr-sophie-scamps-bid-to-address-australias-childhood-obesity-levels/2022>.
- Donaldson A, Reimers JL, Brophy KT, Nicholson M. Barriers to rejecting junk food sponsorship in sport—a formative evaluation using concept mapping. *Publ Health* 2019;**166**:1–9.
- Hawkes C, Russell S, Isaacs A, Rutter H, Viner R. What can be learned from the Amsterdam Healthy Weight Programme to inform the policy response to obesity in England? *Obes Pol Res Unit (OPRU): Rapid Resp Brief Paper* 2017.
- Australian Bureau of Statistics. *Table 21: children's participation in cultural and leisure activities, Australia, 2012 – Victoria*. 2012. <https://www.abs.gov.au/AUSSTATS/abs@.nsf/DetailsPage/4901.0Apr%202012?OpenDocument> (accessed August 2020).
- Braun V, Clarke V. Using thematic analysis in psychology. *Qual Res Psychol* 2006;**3**(2):77–101.
- Good Sports. *Alcohol and Drug Foundation. Australia* [cited 2021 25/11/2021]. Available from, <https://goodsports.com.au/program/>.
- Donaldson A, Nicholson M. Attitudes of sports organisation members to junk food sponsorship. *Publ Health* 2020;**185**:212–7.
- Kickbusch I, Allen L, Franz C. The commercial determinants of health. *Lancet Global Health* 2016;**4**(12):e895–6.
- Kwon J, Cameron AJ, Hammond D, White CM, Vanderlee L, Bhawra J, et al. A multi-country survey of public support for food policies to promote healthy diets: findings from the International Food Policy Study. *BMC Publ Health* 2019;**19**(1):1205.
- Grunseit A, AUSPOPS 2016–2021: Third national report. *The Australian prevention partnership centre*. June 2021.
- Foundation for Alcohol Research and Education (FARE). *BoozeFreeSport Stop serving alcohol ads in sport*. 2018.
- Savona N, Thompson C, Smith D, Cummins S. Proportional responsibility versus individual responsibility for healthy eating: a complex systems analysis. *Lancet* 2017;**390**:S80.
- Allender S, Brown AD, Bolton KA, Fraser P, Lowe J, Hovmand P. Translating systems thinking into practice for community action on childhood obesity. *Obes Rev* 2019;**20**(S2):179–84.
- Chung A, Backholer K, Zorbas C, Hanna L, Peeters A. Factors influencing sweet drink consumption among preschool-age children: a qualitative analysis. *Health Promot J Austr* 2021;**32**:96–106.
- Wolfson JA, Gollust SE, Niederdeppe J, Barry CL. The role of parents in public views of strategies to address childhood obesity in the United States. *Milbank Q* 2015;**93**(1):73–111.
- Brown V, Ananthapavan J, Veerman L, Sacks G, Lal A, Peeters A, et al. The potential cost-effectiveness and equity impacts of restricting television advertising of unhealthy food and beverages to Australian children. *Nutrients* 2018;**10**(5):622.
- VicHealth. *Our history*. <https://www.vichealth.vic.gov.au/about/our-history>.
- Vic Kids Eat Well. *All kids deserve the opportunity for a healthy start*. Cancer Council Victoria. Nutrition Australia. Victoria State Government; 2022. <https://www.vickidseatwell.health.vic.gov.au/>.

Appendix A Supplementary data

Supplementary data to this article can be found online at <https://doi.org/10.1016/j.anzjph.2023.100024>.