






A state-wide audit of unhealthy sponsorship within junior sporting clubs in Victoria, Australia

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Abstract

Objective: To systematically audit the extent of unhealthy sponsorship within junior community sporting clubs and ascertain whether differences exist across geographical areas and sport types.

Design: Club sponsorship data were assessed to determine the extent of unhealthy food/beverage, alcohol and gambling sponsorship using a cross-sectional design. Differences across geographical areas were assessed using logistic regressions.

Setting: A stratified random sampling procedure was used to select thirty communities across the state of Victoria, Australia. Within each community, local clubs across the top eight participating junior sports were selected for audit.

Participants: Sponsorship data were collected from 191 club websites and Facebook pages in September–November 2019.

Results: Unhealthy sponsorships represented 8.9% of all identified sponsorship arrangements. A quarter of all clubs accepted alcohol (25.6%) and unhealthy food sponsors (25.9%), and one-fifth of all clubs accepted high-risk food (unhealthy brands with large market share) (18.1%) and gambling sponsors (20.4%). Acceptance of unhealthy sponsorship differed across sport types with football, netball, cricket and soccer clubs having the greatest numbers. Compared with metro areas, a significantly greater proportion of sporting clubs in regional areas were affiliated with unhealthy food (32.7% *v.* 19.6%) and high-risk food sponsors (26.9% *v.* 9.8%). A higher proportion of clubs in low socio-economic status (SES), compared with the high SES areas, were affiliated with alcohol (33.9% *v.* 16.5%) and gambling sponsors (27.4% *v.* 12.6%).

Conclusion: Victorian children participating in community junior sports are being exposed to marketing of unhealthy brands and products. Public health intervention is necessary to protect children from this exposure.

Keywords
Sport sponsorship
Fast-food
Alcohol
Gambling
Community club
Children

Excessive consumption of unhealthy (high in salt, sugar and/or saturated fat) foods and beverages, and alcohol are key risk factors for morbidity and mortality in Australia and globally^(1,2). Excessive or problematic gambling behaviour has also been shown to be associated with significant health and substance use problems and negative social and economic consequences^(3,4).

Sports sponsorship is one of many ways that food and beverage, alcohol and gambling industries promote their products^(5–7). In the commercial marketing literature, sponsorship has been defined as ‘an investment, in cash or in-kind, with an activity, in return for access to the exploitable

commercial potential associated with that activity⁽⁸⁾. It provides companies with opportunities to expose large audiences to their brands and establish and maintain brand associations^(9,10). Recurrent exposure to sponsorship contributes to the normalisation of the sponsored brands and products⁽¹¹⁾. Additionally, sports sponsorship facilitates the transfer of the positive and healthy associations of sport across to sponsoring brands, creating favourable perceptions of those brands among players and spectators^(12–14).

Sponsorship of children’s sports is of particular concern as children are more vulnerable to marketing

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strategies^(15–17). Sports sponsorship can influence children's awareness of, and attitudes and behavioural intentions towards the consumption of sponsored brands and products^(9,10,18,19). These impacts can be long-lasting, as health behaviours that are established during childhood tend to track into later years⁽²⁰⁾. Evidence also suggests that the impact of sports sponsorship may be greater when children have an attachment to their sports clubs, practically through direct involvement and/or emotionally^(11,21).

Two-thirds of Australian children (67%) up to age of 14 participate in organised sport outside of school hours⁽²²⁾. Australian community sporting clubs rely on sponsorship revenue for the viability of their clubs⁽²³⁾. A small number of Australian studies have demonstrated that the prevalence of unhealthy food, beverage and alcohol sponsorship in community sporting clubs is high^(21,24,25). For example, Gonzalez *et al.* concluded that 49% of the junior clubs (Australian rules football and rugby league) that participated in their study (n 79) were sponsored by the alcohol industry and 27% by the fast-food industry⁽²⁵⁾. Similarly, Ooi *et al.*'s observational study found that 26% of thirty-nine clubs (soccer, Australian rules football, rugby union and rugby league) in the state of New South Wales had sponsorship arrangements with fast-food or sweetened-beverage companies, which was more common in regional areas than major cities⁽²⁴⁾. While these studies make important contributions to the field, they have generally been limited by small sample sizes and limited variation across sport types, geographical areas and socio-economic status (SES). Such information is crucial for equitable and targeted public health initiatives that could reduce sponsorship exposure to youth at community sporting clubs. Based on research in other countries, there is reason to believe that gambling companies also sponsor community sporting clubs⁽¹¹⁾.

In the current study, we aimed to systematically audit eight of the top participating junior sports across a representative sample of community sporting clubs in Victoria to determine the extent of unhealthy food and beverages, alcohol and gambling sponsorship and ascertain whether differences exist across sport types and geographical areas by level of remoteness and SES.

Methods

Sampling

A stratified random sampling technique was used to select thirty communities in Victoria, which is the most densely populated state in Australia with a population of approximately 6.6 million. Communities were selected at the Statistical Area 2 (SA2) (suburb or rural town) across two areas of remoteness using the Accessibility Remoteness Index of Australia classification from the Australian Bureau of Statistics and across tertiles of socio-economic disadvantage (low, medium or high neighbourhood area-level

disadvantage, using the SocioEconomic Index for Areas Indicator of Relative Socioeconomic Disadvantage; SEIFA). There is a total of 454 SA2 in Victoria, each representing a community that interacts socially and economically with a population between 3000–25 000 people⁽²⁶⁾.

The top eight sports with highest participation among Victorian boys and girls aged 5–14 years were selected⁽²⁷⁾. We excluded 'swimming' (ranked number 1) as over half of the participants are aged between 5–8 years⁽²⁷⁾ and swimming lessons likely being the predominant form of participation, rather than swimming at club level. We also excluded 'martial arts' as these clubs are often run by small independent providers in Australia. This resulted in the following eight teams and individual sports, which were included in our analysis: Australian rules football, netball, basketball, tennis, cricket (outdoor), gymnastics, soccer (outdoor) and athletics.

Once an SA2 area was selected, we identified the junior community sporting clubs for each of the sport types using club search engines on the sporting associations' websites for a given area. Clubs were only included if the club's website indicated it had an active youth membership base, that is, the club provided lessons/training/programmes for children (5–14 years of age). For athletics, we used the Little Athletics Association website to identify a club in each area⁽²⁸⁾. If there were multiple clubs per sport type in the SA2, then we selected the club closest to the geographical centre of the SA2 using a google pin (maximum radius of 50 km). A total of 238 clubs were considered eligible for audit. From these, five clubs were excluded as they did not have an online presence. Clubs often served an area that covered more than one of the SA2 sampled for our analysis, reducing the total sample size by a further seventeen clubs, to 216. When clubs included multiple sports (n 22; often football/netball clubs, sometimes football/netball/cricket) we considered these clubs separately to capture sponsorship exposure to the distinct sporting participants. In total, 191 individual clubs, representing 216 sports, were audited.

Data collection and coding of unhealthy sponsors

An audit of unhealthy sponsorship agreements across Victorian junior sports clubs using websites and social media (Facebook) was conducted between September and November 2019. Sponsors were identified if their names or logos were listed on club websites, for example, on sponsor or partner pages, on bottom of homepages, printed on club apparel or in newsletters or annual reports (up to 12 months prior). The clubs' Facebook pages were visited to identify additional sponsors through photos posted up to 12 months ago, for example, sponsorship endorsement on players' apparel, on boundary signs or goal posts. In cases where it was unclear if the sponsorship arrangement was with the participating club or their opponent, the sponsor was not included in our study.



A structured coding tool was developed *a priori* and used by the researchers to record total number of sponsors per club, as well as names and primary service of food and beverage, alcohol or gambling sponsors. All sponsors were coded as 'alcohol', 'gambling', 'food/beverage' and 'other'. Pubs, hotels, liquor retailers and wineries were coded as 'alcohol', as per previous studies⁽²⁵⁾. Sponsors were classified as 'gambling' if the sponsor was a gaming centre, casino or a community gambling venue (pub or club) with sports betting facilities or electronic gambling machines (also known as pokies, slot machines or fruit machines). These were identified through a search engine on the website of the Victorian statutory authority regulating gambling in the state⁽²⁹⁾. We coded pubs with gambling facilities as 'gambling sponsors' as research has found that Australians who visit pubs and clubs for non-gambling activities also more regularly use gambling products within these venues⁽³⁰⁾. The same authors found that children who attended such pubs and clubs with their families have positive overall perceptions of the gambling activities within these venues⁽³¹⁾. As a consequence, fifty pubs were coded as both gambling and alcohol sponsors.

Further, to classify whether a food and/or beverage sponsor was unhealthy or not, we adapted an existing food outlet healthiness tool to also include food brands and companies^(32,33). This adaptation meant that brands were coded in the same manner that outlets were coded according to their primary service and assigned to one of the following three categories: healthy (+5 to +10), less healthy (-4 to +4) and unhealthy (-10 to -5) food sponsors (see online supplementary material, Supplemental Table 1). From this, we created a 'high-risk' food sponsor category, which consisted of all unhealthy food brands considered to have a large market share based on sales volume (as per Euromonitor definition⁽³⁴⁾) and therefore a large brand profile. We report on 'unhealthy food sponsors' (consisting of both high- and low-risk unhealthy food sponsors), 'high-risk food sponsors' and 'other food sponsors' (healthy and less healthy sponsors combined).

We did not capture youth development programme sponsors (e.g., Little Athletics programme that is sponsored by Subway) as we were interested in the procurement of sponsors from the community club and not those facilitated by broader state-wide programmes. Four researchers (S.M., D.R., A.G., F.M.) collected sponsorship data from clubs and one researcher (F.M.) coded and analysed the data.

Analysis

Descriptive analyses were performed using SPSS software (version 25.0) to calculate frequencies and proportions of sponsorship arrangements across sport types, metropolitan or regional location (based on the Australian Bureau of Statistics Accessibility Remoteness Index of Australia where metropolitan clubs were those classified as 'major cities' and regional clubs were those classified as 'inner and outer regional'), and areas of high or low of socio-economic

disadvantage (dichotomised into 'low' and 'high' areas of socio-economic disadvantage based on the Socio-Economic Indexes for Areas from the Australian Bureau of Statistics). Variables for club location and SES were dichotomised to maximise power for analysis. Univariate and multivariable (including variables for sport type, level of remoteness and area level of socio-economic disadvantage) logistic regression models were fitted to the data to analyse the associations between acceptance of unhealthy food, high-risk food, alcohol, or gambling sponsorship and type of sport, metropolitan or regional location and neighbourhood area-level disadvantage. For the current analysis, the sport types found to have relatively fewer unhealthy sponsors – basketball, tennis, gymnastics and athletics – were combined into a category of 'other' to ensure sufficient power for analysis. Statistical significance was set at a *P*-value of <0.05.

Results

Unhealthy sponsorship across all sports clubs

The majority of clubs reported their sponsors on both club website and Facebook page; only two cricket clubs did not report sponsors on their webpage and unhealthy sponsors were only identified via photos on their Facebook page. This meant for these two clubs we only collected sponsors of interest and could not include a count of 'other sponsors'. In 216 clubs, a total of 2032 sponsors were identified, with football (*n* 606) and netball clubs (*n* 471) having the highest number of sponsors. The number of sponsors ranged from zero to fifty sponsors with a mean of ten sponsors per club. When combining all unhealthy sponsors, including those representing alcohol, gambling and unhealthy food, these sponsors represented 8.9% of all identified sponsorship arrangements in our sample of Victorian junior community sports clubs (data not shown). Table 1 summarises the number and categorisation of sponsors identified on websites and social media for each of the sport types included in the study and across regional and metro and high and low areas of socio-economic disadvantage. Of all sponsors, alcohol sponsors accounted for 4.0% and gambling sponsors accounted for 2.6%. Additionally, 4.7% of all sponsors were categorised as unhealthy food sponsors and 2.2% of all sponsors were classified as high-risk food sponsors, which mainly consisted of fast-food companies. Other food sponsors included greengrocers, supermarkets, bakeries and independent restaurants (see online supplementary material, Supplemental Table 1), which were identified across all sport types, and across metropolitan, regional, low SES and high SES areas. These healthier sponsors sponsorships represented 9.2% of all identified sponsors (Table 1). This was higher for gymnastics (26.3%), athletics (18.6%), cricket (11.2%) and soccer (10.1%). 'Other sponsors' represented 81.9% of all sponsorship arrangements.

A total of 37.5% of clubs accepted at least one type of unhealthy sponsorship (data not shown). More than a

Table 1 Number and categorisation of sponsorship listings on Victorian community sports club websites and Facebook pages between September and November 2019

	Sports clubs	Total sponsors	Alcohol sponsors*		Gambling sponsors†		High-risk food sponsors‡		Unhealthy food sponsors (low and high risk combined)§		Other food sponsors		All other sponsors	
	<i>n</i>	<i>n</i>	<i>n</i>	%	<i>n</i>	%	<i>n</i>	%	<i>n</i>	%	<i>n</i>	%	<i>n</i>	%
All	216	2032	82	4.0	53	2.6	45	2.2	96	4.7	186	9.2	1665	81.9
Regional	104	1086	52	4.8	30	2.8	31	2.9	55	5.1	96	8.8	881	81.1
Metro	112	946	30	3.2	23	2.4	14	1.5	41	4.3	90	9.5	784	82.9
Low SES	113	1174	51	4.3	41	3.5	27	2.3	56	4.8	105	8.9	964	82.1
High SES	103	858	31	3.6	12	1.4	18	2.1	40	4.6	81	9.4	701	81.7
Sports														
Football	30	606	28	4.6	16	2.6	15	2.5	30	5.0	47	7.8	500	82.5
Netball	29	471	19	4.0	12	2.5	10	2.1	19	4.0	38	8.1	394	83.7
Cricket¶	30	232	15	6.5	10	4.3	5	2.2	13	5.6	26	11.2	177	76.3
Soccer	25	357	10	2.8	9	2.5	6	1.7	20	5.6	36	10.1	291	81.5
Basketball	28	184	3	1.6	1	0.5	7	3.7	11	6.0	16	8.7	154	83.7
Tennis	27	104	2	1.9	2	1.9	2	1.9	2	1.9	7	6.7	93	89.4
Gymnastics	25	19	2	10.5	0	0.0	0	0.0	0	0.0	5	26.3	12	63.2
Athletics	22	59	3	5.1	3	5.1	0	0.0	1	1.7	11	18.6	44	74.6

*Alcohol sponsors include off premise liquor outlets (e.g., bottle shops), pubs and clubs, and wineries.

†Gambling includes pubs and clubs with TAB and/or pokies facilities, and gaming centres.

‡High-risk food sponsors include all unhealthy food brands that were considered to have a large market share based on sales volume – these mainly consisted of fast-food brands and companies.

§All unhealthy food sponsors include both high-risk and low-risk unhealthy food sponsors.

||Examples of other sponsors are local real estate agents, plumbing businesses, accountants, etc.

¶For two cricket clubs, the number of 'other sponsors' was unknown; their unhealthy sponsors were identified on Facebook.

quarter of all clubs accepted alcohol sponsors (25.6%) and unhealthy food sponsors (25.9%), and around one-fifth of all clubs accepted gambling sponsors (20.4%) and high-risk food sponsors (18.1) (Tables 2 and 3).

Unhealthy sponsorship across sport types

Football and netball clubs were identified as having the highest number of unhealthy sponsors, followed by other team sports including soccer, cricket and basketball (Table 1). The odds of being affiliated with an alcohol sponsor was 17.5 (95% CI (5.86, 52.10)) fold greater for football clubs compared with 'other' sports (basketball, tennis, gymnastics and athletics; 53.3 and 6.9%, respectively). The odds for having gambling sponsorship arrangements were 10.0 fold greater for football (95% CI (3.20, 31.37)) and cricket clubs (95% CI (3.20, 31.37)) compared with 'other' sports, with 36.7% of both football and cricket clubs accepting gambling sponsorship. The odds of being affiliated with an alcohol or gambling sponsor were also significantly greater for netball and soccer clubs compared with 'other' sports (Table 2). These associations were evident in both univariate and multivariable models.

When comparing the proportion of clubs that were affiliated with a high-risk food sponsor, football (OR 8.6, 95% CI (2.96, 25.11)) and netball clubs (OR 5.4, 95% CI (1.81, 16.39)) had higher odds compared with 'other' sport types (40.0, 31.0 and 7.9%, respectively). Similar differences were found across sport types that accepted unhealthy food sponsorship. These associations were evident for both univariate and multivariable models (Table 3).

Unhealthy sponsorship across geographical areas

There was also a significant difference in the proportion of clubs located in the areas of low and high socio-economic disadvantage that accepted alcohol sponsors (33.9% *v.* 16.5%; OR 3.0, 95% CI (1.47, 6.22)) or gambling sponsors (27.4% *v.* 12.6%; OR 2.8, 95% CI (1.33, 6.15)) (Table 2). Compared with metropolitan areas, a greater proportion of sports clubs located in regional areas were found to be affiliated with high-risk food sponsors (26.9% *v.* 9.8%; OR 3.6, 95% CI (1.62, 8.04)) and unhealthy food sponsors (32.7% *v.* 19.6%; OR 2.1, 95% CI (1.08, 4.20)), independent of sport type and area level of socio-economic disadvantage (Table 3).

Discussion

In the current study, we audited the websites and Facebook pages of 216 Victorian community sporting clubs across eight of the top sports in thirty randomly selected communities. We found that more than one-third of all clubs accepted unhealthy sponsors (alcohol, gambling, unhealthy- and high-risk food sponsors combined). Unhealthy sports sponsorship differed across sport types with more than half of football clubs and over a third of netball, cricket and soccer clubs identified as being affiliated with an alcohol or an unhealthy food sponsor. Around a third of football, netball, cricket and soccer clubs accepted gambling sponsorship and 40% of football clubs and a third of netball clubs accepted



Table 2 Associations between proportion of Victorian junior sporting clubs that accept alcohol or gambling sponsorship and type of sport, location and socio-economic status (SES)

	Proportion clubs accepting alcohol sponsorship						Proportion clubs accepting gambling sponsorship						
	%	<i>n</i>	Unadjusted OR	95 % CI	Adjusted OR	95 % CI	%	<i>n</i>	Unadjusted OR	95 % CI	Adjusted OR	95 % CI	
All clubs	25.6	55	n/a			n/a			20.4	44	n/a		
Sports													
Football	53.3	16	15.3	5.37, 43.90*	17.5	5.86, 52.10*	36.7	11	9.3	3.05, 28.10*	10.0	3.20, 31.37*	
Netball	37.9	11	8.2	2.81, 24.01*	8.6	2.85, 25.88*	27.6	8	6.1	1.9, 19.43*	6.2	1.90, 20.31*	
Cricket	40.0	12	9.0	3.10, 25.84*	9.7	3.25, 28.92*	36.7	11	9.3	3.05, 28.10*	10.0	3.20, 31.37*	
Soccer	36.0	9	7.6	2.46, 23.17*	8.8	2.85, 28.17*	32.0	8	7.5	2.32, 24.44*	8.8	2.62, 29.75*	
Other†	6.9	7	Reference			Reference			5.9	6	Reference		
Level of remoteness													
Regional	30.1	31	1.58	0.85, 2.93	1.5	0.75, 3.06	25.0	26	1.7	0.89, 3.41	1.7	0.81, 3.54	
Metro	21.4	24	reference			reference			16.1	18	reference		
Area level of socio-economic disadvantage													
Low SES	33.9	38	2.6	1.36, 4.98*	3.0	1.47, 6.22*	27.4	31	2.6	1.28, 5.34*	2.8	1.33, 6.15*	
High SES	16.5	17	Reference			Reference			12.6	13	Reference		

n/a, not applicable.

*Significant, *P*-value <0.05.

†'Other' was created due to low cell counts and combines the following sports: basketball, tennis, athletics and gymnastics.

Table 3 Associations between proportion of Victorian junior sporting clubs that accept high-risk food or unhealthy food sponsorship and type of sport, location and socio-economic status

	Proportion clubs accepting high-risk food sponsorship§						Proportion clubs accepting unhealthy food sponsorship‡						
	%	<i>n</i>	Unadjusted OR	95 % CI	Adjusted OR	95 % CI	%	<i>n</i>	Unadjusted OR	95 % CI	Adjusted OR	95 % CI	
All clubs	18.1	39	n/a			n/a			25.9	56	n/a		
Sports													
Football	40.0	12	7.8	2.81, 21.87*	8.6	2.96, 25.11*	50.0	15	9.2	3.49, 24.23*	9.7	3.6, 26.00*	
Netball	31.0	9	5.3	1.82, 15.38*	5.4	1.81, 16.39*	34.5	10	4.8	1.78, 13.24*	4.8	1.74, 13.46*	
Cricket	16.7	5	2.4	0.71, 7.81	2.3	0.68, 7.99	30.0	9	3.9	1.43, 10.91*	4.0	1.42, 11.20*	
Soccer	20.0	5	2.94	0.87, 9.92	3.3	0.93, 11.45	48.0	12	8.5	3.06, 23.56*	9.5	3.33, 27.05*	
Other†	7.8	8	Reference			Reference			9.8	10	Reference		
Level of remoteness													
Regional	26.9	28	3.4	1.59, 7.22*	3.6	1.62, 8.04*	32.7	34	2.0	1.07, 3.70*	2.1	1.08, 4.20*	
Metro	9.8	11	Reference			Reference			19.6	22	Reference		
Area level of socio-economic disadvantage													
Low SES	20.4	23	1.4	0.69, 2.81	1.3	0.59, 2.71	29.2	33	1.4	0.76, 2.66	1.4	0.73, 2.84	
High SES	15.5	16	Reference			Reference			22.3	23	Reference		

n/a, not applicable.

*Significant, *P*-value <0.05.

†'Other' was created due to low cell counts and combines the following sports: basketball, tennis, athletics and gymnastics.

‡All unhealthy food sponsors include both high-risk and low-risk unhealthy food sponsors.

§High-risk food sponsors include all unhealthy food brands that were considered to have a large market share based on sales volume – these mainly consisted of fast-food brands and companies.



high-risk food sponsors. The proportion of football, netball, cricket and soccer clubs accepting these types of sponsorships was significantly higher compared with clubs for less popular (basketball) or individual (tennis, athletics and gymnastics) sports.

The higher proportion of unhealthy sponsors across team-based sports compared with individual sports may reflect lower membership fees and/or higher costs for clubs representing team sports. Additionally, larger clubs are likely to have greater reach allowing for greater marketing exposure, potentially making sponsorship of these sports more attractive to sponsors.

We found very little contemporary evidence, in Australia and globally, describing the extent of unhealthy sponsorship accepted by junior community sporting clubs. However, our findings are in accordance with a recent study by Gonzalez *et al.*, which examined sponsorship arrangements across seventy-nine junior community sporting clubs (covering Australian rules football (AFL) and rugby league) in the Australian states of New South Wales and Victoria participating in the 'Good Sports Program'. Similar to our findings, the study found a high proportion of clubs were affiliated with an alcohol or fast-food company, with half the clubs sponsored by the alcohol industry and a quarter sponsored by fast-food companies⁽²⁵⁾.

We also found that the odds of being affiliated with an unhealthy food and high-risk food sponsor were 2–3 fold greater for clubs located in regional compared with metro areas (no significant difference for alcohol and gambling sponsorship). These findings concur with those of Gonzalez *et al.* who found that sporting clubs located in regional areas are more likely to be sponsored by fast-food companies compared with clubs located in metropolitan areas⁽²⁵⁾. It is plausible that the regional difference relates to the greater number of all food sponsors (healthy and unhealthy) in regional areas, reflecting a greater reliance on sponsorship to cover operating costs of the club. Gonzalez *et al.* did not find regional or socio-economic differences in alcohol sponsorship, which may be attributed to the selection of clubs that had to have a level 3 'Good Sports' accreditation, meaning that clubs were already actively addressing alcohol use. We did however find that clubs located in low SES areas had approximately a three-fold odds of accepting alcohol or gambling sponsorship compared with clubs located in higher SES areas. This may be due to the higher concentration of gaming venues in low SES areas⁽³⁵⁾ and may contribute to existing socio-economic differences in excessive alcohol consumption and problem gambling⁽³⁶⁾.

We found that less than 10 % of all community sports club sponsorship in Victoria represent brands and companies that sell or represent unhealthy food and/or beverages, alcohol or have gambling facilities. While this is a relatively low proportion, it reflects the high volume of sponsorship arrangements with clubs overall. The number of sponsors

ranged from zero to fifty sponsors with a mean of ten sponsors per club. These total volumes of sponsors identified in our study indicate the reliance of clubs on sponsorship revenue and, simultaneously, demonstrate that there are a wide variety of sponsors available, which are not associated with health-harming products. These included a number of healthier food sponsors, predominantly supermarkets, local restaurants, bakeries, greengrocers and butchers. Such sponsors can play an important role in replacing unhealthy sponsors – a practice supported by the majority of Australian parents^(25,37) – particularly in the event of funding shortfalls from the cessation of unhealthy sponsorship arrangements⁽³⁸⁾. Recent research has identified that healthy sponsorships have led to increased awareness of and preferences for healthy products while at the same time decreasing preferences for unhealthy products^(38,39). Furthermore, healthy sponsorships are likely to be mutually beneficial to business and sporting clubs⁽⁴⁰⁾.

Nonetheless, 40 % of all football clubs and 31 % of all netball clubs audited in our study accepted high-risk food sponsorship, the majority of which were large fast-food companies that are likely to have larger budgets for community sponsorship deals. These sponsors are also likely to have a more effective marketing impact due to their existing brand equity and greater marketing reach⁽⁴¹⁾. For example, a sign on a field boundary or player's shirt may not have a large impact on young club members when the brand or company logo is relatively unknown compared with the logo of a well-known brand, which will have greater resonance.

Children participating in community-level sport have been shown to also be exposed to high levels of unhealthy sponsors from the national and state sporting organisations⁽⁴²⁾ and the junior sport development programmes⁽⁴³⁾. We did not assess these sponsors, as we were interested in sponsorship deals that individual clubs have authority over with regard to what sponsorship they do and do not accept. Nevertheless, our findings support the results of prior studies that children are exposed to high volumes of unhealthy marketing through sports and support recommendations that policies and practices be put in place to protect children from exposure to unhealthy food, beverage, alcohol and gambling marketing^(42,43).

The strengths of the current study include the selection of a random sample of communities, representing both metropolitan and regional locations and areas of high and low SES from which we selected our sporting clubs, as well as the coverage across eight of the most participated sports for both boys and girls aged 5–14 years. We are limited by the information collected, whereby we could ascertain the different types of sponsors that were affiliated with sporting clubs, but we cannot be sure if the sponsorship information on club websites and Facebook pages were a true reflection of current sponsorship arrangements. Further, we were unable to collect information on club size (member numbers, which may influence the number and



type of sponsors), the value of the sponsorship deal and the prominence of the sponsor within the club. Ultimately, this additional information is likely to be more important with regard to children's sponsorship exposure and the difficulties in rejecting unhealthy sponsorship compared with other small sponsorship deals. Further, the tool we used to classify how healthy a food sponsor is limited, as it merely considers the type of outlet or brand, which may not reflect the variety of foods sold by the individual sponsors. Finally, we are also limited by the selection of thirty communities of an available 454 (7%) and by the Victorian focus of our study, potentially limiting the generalisability of our findings to other Australia States and Territories and other countries. However, findings appear broadly similar across other States in Australia⁽²³⁾.

Conclusion

Unhealthy sponsorship is pervasive throughout junior community sports clubs in Victoria, in particular in clubs representing team sports and clubs located in regional areas. Junior sports clubs are uniquely positioned to promote health and well-being among children in their community. This should include healthy sports sponsorship models. Reducing alcohol, gambling and high-risk food sponsorship in children's sport should be considered as an essential component of a broader comprehensive strategy to reduce all unhealthy marketing to children.

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Supplementary material

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