

Cancer Council WA
Rapid Obesity
Policy Translation
Research Project



AUDIT OF OUTDOOR FOOD ADVERTISING NEAR PERTH SCHOOLS: BUILDING A LOCAL EVIDENCE BASE FOR CHANGE

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Ms Joelle Mandzufas, Mr Wesley Billingham*



Funded by:



Proudly supported by the people of Western
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Outdoor advertising



Overall aim

Generate robust evidence describing, benchmarking and quantifying the volume and nature of all outdoor food advertising within a 500m radius of Perth schools



INFORMAS protocol

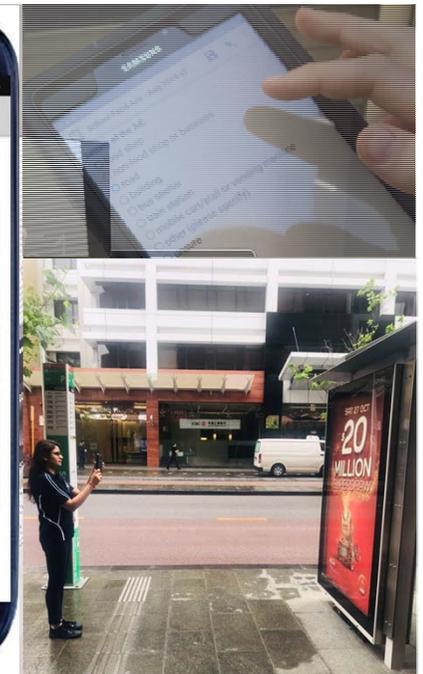
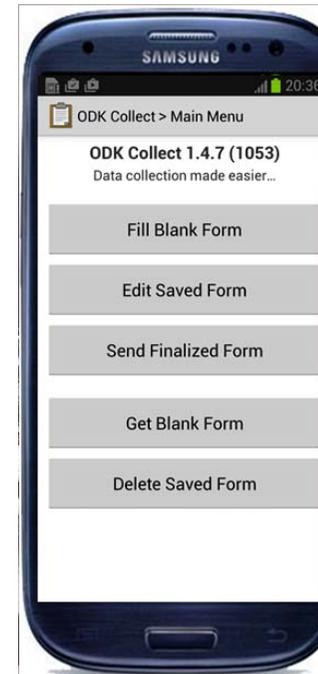
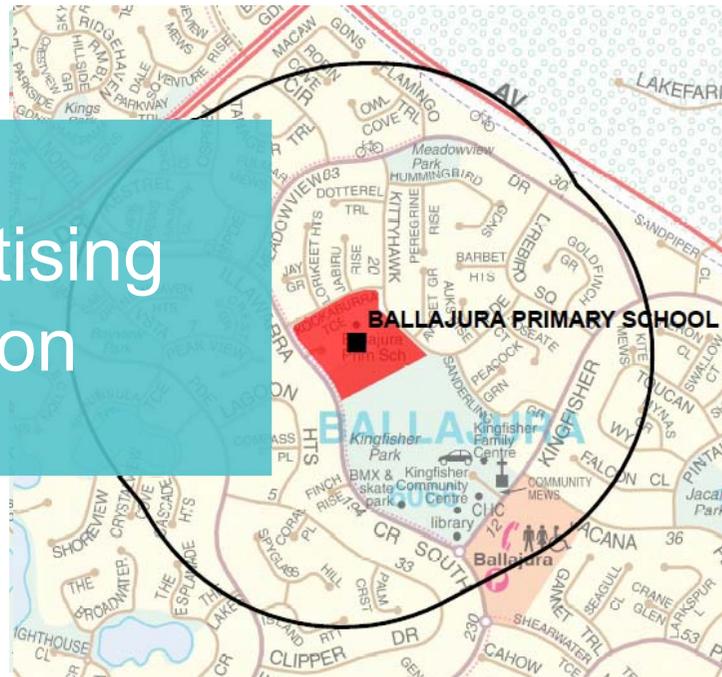
Methodology for monitoring outdoor advertising around schools enabling intra and inter-country comparisons



School selection

64 schools (primary, secondary, K-12) across 16 Perth LGA's were selected using random sampling within population density (high/low) and SES (high/low) strata

Outdoor advertising data collection



GIS NAVIGATION MAPS

Area within 500m radial buffer around school boundary scanned on foot by trained research staff for all outdoor ads (*defined as stationary objects containing either a recognisable logo and/or an intended message*)

Majority of data collection occurred July-Dec 2019

AUDITORS USED TABLETS

- Data entry/coding
- Photograph
- Geolocation of each ad on-site used to determine the distance from each ad to the school boundary via GIS

Advertisement coding - size



Small

≥A4 but <1.3m x 1.9m



Medium

>1.3m x 1.9m but
<2.0m x 2.5m



Large

>2.0m x 2.5m

Advertisement coding - type



Advertisement coding – setting



Food shop



Non-food shop



Road



Building



Bus shelter



Train station

Advertisement coding – content

Food

INFORMAS/AGTHE aligned food categories:

- Core (healthy) foods recommended to meet daily nutritional req (n=11)
- Non-core (unhealthy) foods surplus to daily requirements (n=15)
- Miscellaneous foods (n=4)
- Branding only (companies/logos and brands, no products)



Non-food

Retail, entertainment and leisure, motor vehicles, finance, communications, travel/accommodation, media/TV/news, Government/Council



Advertisement coding – content

Other info recorded:

- Company/shop/business and/or brand
- Pictures and/or words
- Number of food products and INFORMAS/AGTHE sub-categories depicted in each ad
- Outdoor advertising company (if applicable, e.g., APN)

Ineligibility criteria:

- Real estate signs (e.g., for sale/open for inspection)
- Construction signage, fencing or screening
- On-premise signage imparting info only (e.g., name, contact details, logo, opening hours)
- Ads inside stores (except windows)
- Community safety or public information only



Our data collection team



Investigators, research staff & students

- Gina Trapp (Project Lead)
- Paula Hooper (GIS/Map support)
- Lukar Thornton (App support)
- Joelie Mandzufas (Project Co-ordinator)
- Wesley Billingham (Statistician)
- Emma Charlton (Research Assistant)
- Naomi Plummer (Research Assistant)
- Olivia Catchick (Research Assistant)
- Michaela Johnston (Research Assistant)

- Amy Sievers (Practicum student)
- Monica McDonald (Practicum student)
- Nicole Wickens (Practicum student)
- Benedetta Giuntini (Practicum student)
- Smriti Sikri (Practicum student)
- Harindra Vidyattilake (Practicum student)

Volunteers

- Nicole Davidson
- Lisa Anne Spalding
- Aida Noordin
- Campbell Peters
- Cassie Murphy
- Dylan Ferrier
- Emily Chan
- Jacinta Kernaghan
- Kalyisah Farid
- Megan Baker
- Serena Louie
- Isabel Dunstan
- Holifiah Bahar
- Hayley Caratti

Results: School sample

SES	Population Density	Primary School	Secondary School	K-12 school	Total
High	High	9	4	3	16
High	Low	8	4	4	16
Low	High	10	4	2	16
Low	Low	8	7	1	16
	Total	35	19	10	64

VOLUME & NATURE OF OUTDOOR ADVERTISING WITHIN 500M OF PERTH SCHOOLS

RESULTS FROM 64 SCHOOLS
(35 PRIMARY, 29 SECONDARY)



5636

**ADVERTS
IDENTIFIED**

(n=1708)
30%

FOOD ADVERTS

(n=3928)
70%

NON-FOOD ADVERTS

OF THE 1708 FOOD ADVERTS:

74%

n=1271 were for
unhealthy foods



1 in 3
were for alcohol

8%

n=144 were for
healthy foods

11%

n=189 featured
branding information only

6%

n=104 were for
miscellaneous foods



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OF THE 1708 FOOD ADVERTS:

There were **9x**
as many ads for
unhealthy foods
than healthy
foods



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n=144 were for
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n=189 featured
branding information only



6%

n=104 were for
miscellaneous foods

Results: most frequently advertised food products

Alcohol
25%



Fast food
(burgers/chips/pizza/kebabs)
14%



Sugar-sweetened
beverages
13%



Results: Frequency of advertised food products

	UNHEALTHY (NON-CORE) FOOD CATEGORIES	Number of food ads	% of total food ads
1	Alcoholic beverages	403	24%
2	Fast food meals (e.g., burgers, chips , pizza, fish and chips, kebabs)	242	14%
3	Sugar sweetened drinks (e.g., soft drinks, energy drinks, flavoured & electrolyte drinks)	215	13%
4	High fat/salt meals (e.g., fried foods, curry)	178	10%
5	Ice-cream and iced confection	123	7%
6	Sweet breads, cakes, muffins, biscuits, pastries	69	4%
7	Full cream milks/yoghurts (>3g/100g fat), cheese (>15g/100g fat) and their alternatives	61	4%
8	Flavoured noodles/ fried rice products	38	2%
9	Savoury snack food with added salt/fat including chips (crisps), coated nuts	27	2%
10	Chocolate and candy	27	2%
11	Meat and meat alternatives processed or high in salt (e.g., frankfurts, tinned meats)	20	1%
12	Other high fat/salt products (e.g., butter, animal fats, high fat savoury sauces)	20	1%
13	Sweet snack foods (e.g., jelly, sugar coated fruits/nuts, tinned fruit in syrup)	14	<1%
14	High sugar/low fibre breakfast cereals	4	<1%
15	Fruit juices less than 98% fruit	3	<1%



Results: Frequency of advertised food products

	HEALTHY (CORE) FOOD CATEGORIES	Number of food ads	% of total food ads
1	Low fat meals (e.g., soups, sandwiches, salads, sushi)	104	6%
2	Meat and meat alternatives, nuts and seeds	55	3%
3	Fruits and fruit juice >98% fruit	48	3%
4	Vegetables	45	3%
5	Breads, rice and rice products (nothing fried)	41	2%
6	Bottled water (unflavoured mineral/sodas)	10	<1%
7	Healthy snacks – based on core foods (fruit/veg, grain, dairy, meat, meat alternatives)	5	<1%
8	Low in sugar and high in fibre cereals (<20g sugar, >5g of dietary fibre per 100g)	3	<1%
9	Milk, yoghurt, cheese, probiotic drinks	2	<1%
10	Mono/ polyunsaturated fats e.g. olive oils, plant-based margarines	2	<1%
11	Baby foods (not formula)	0	<1%

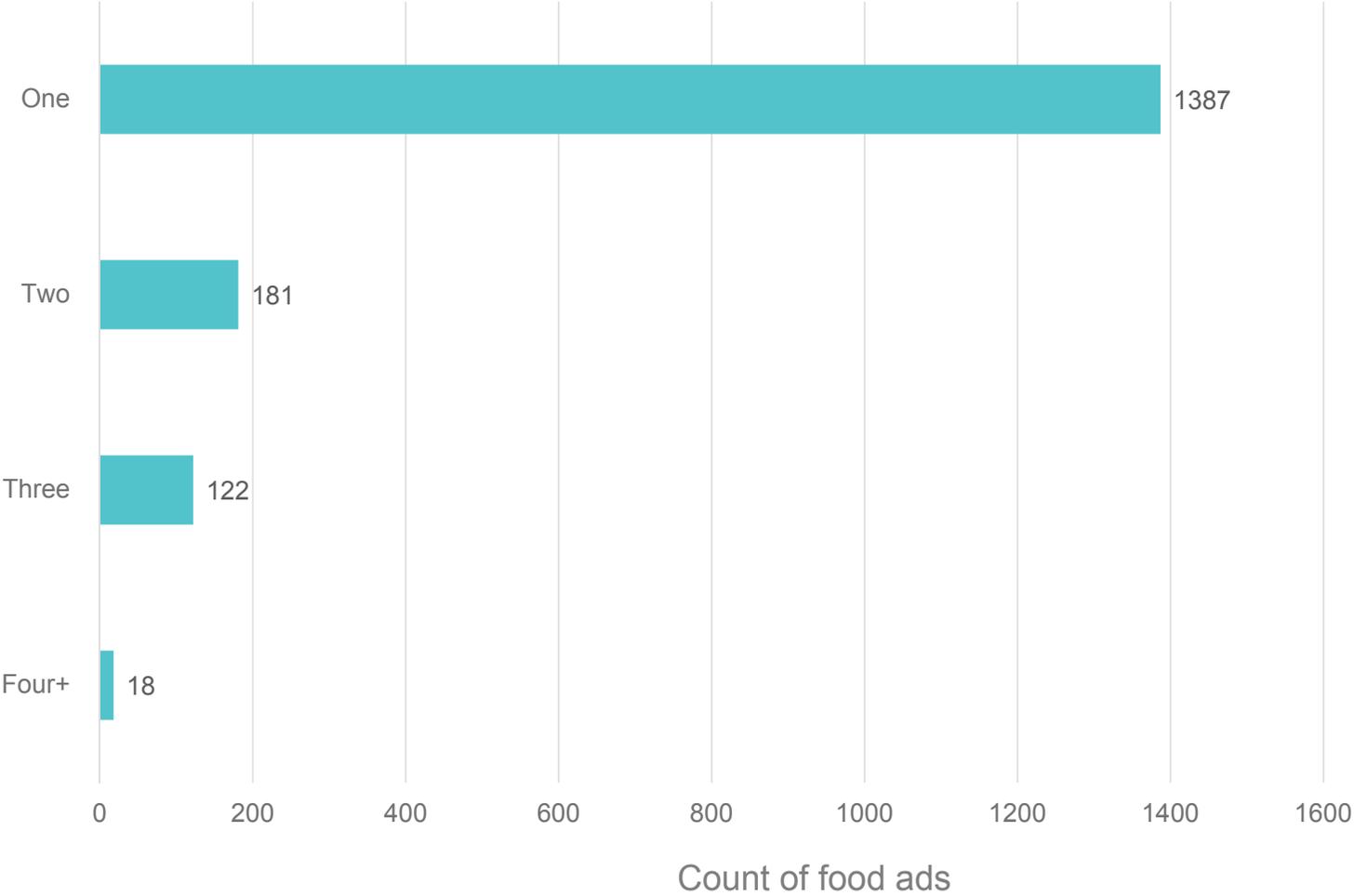


Results: Frequency of advertised food products

	MISCELLANEOUS	Number of food ads	% of total food ads
1	Tea and coffee	191	11%
2	Vitamin/ mineral or other dietary supplements, sugar free gum	32	2%
3	Recipe additions including soup cubes, herbs, seasonings	11	<1%
4	Baby formula	0	0



Results: Number of food sub-categories depicted in each food ad



Results: outdoor advertisements

Within 500m of the 64 schools

3 schools
0 ads of any kind

Average=36 ads, range 3-190

75%
of schools
had ≥ 1 food ad

Average=28 ads, range 1-136

70%
of schools
had ≥ 1 unhealthy food ad

Average=10 ads, range 1-62

55%
of schools
had ≥ 1 alcohol ad

Average=6 ads, range 1-19

37%
of schools
had ≥ 1 healthy food ad

zero ads



Results: Total number of ads within 500m of schools by SES

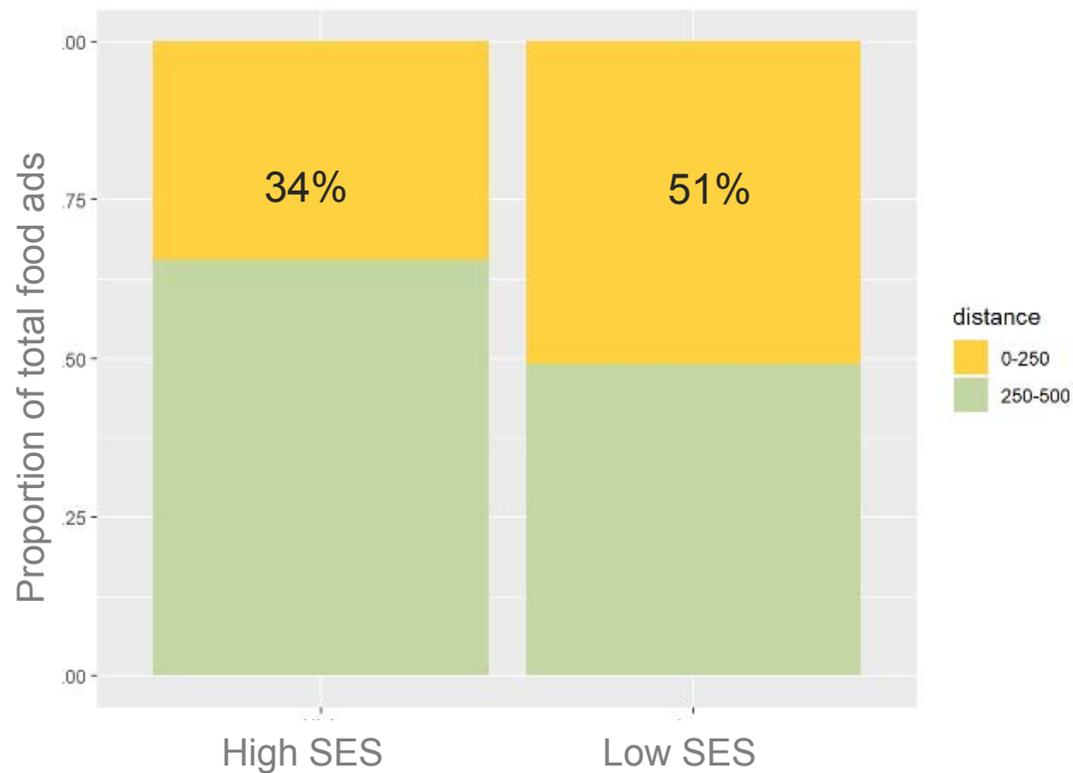


Compared with schools located in HIGH SES areas:

Schools located in LOW SES areas had a significantly higher ratio of unhealthy (non-core) food ads to healthy ads

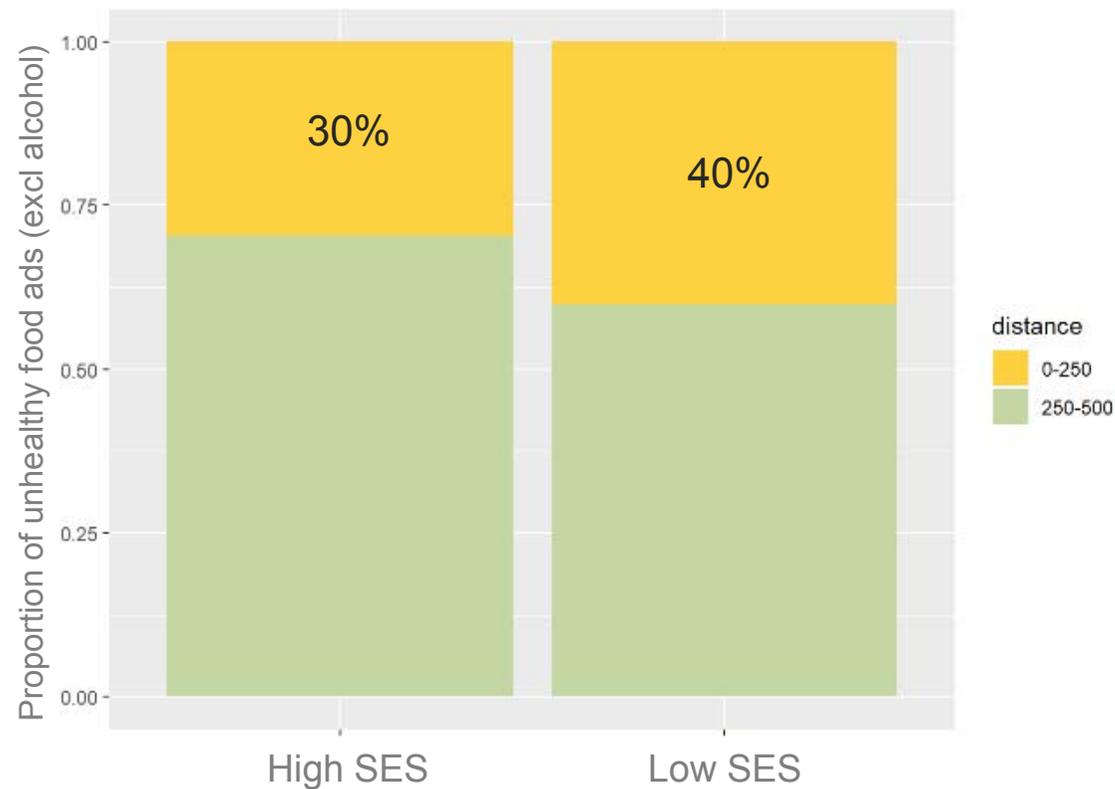
Results: Proportion of ads by SES and distance

Schools located in LOW SES areas had a significantly higher proportion of:
- **total food ads** within 250m (vs 250-500m)



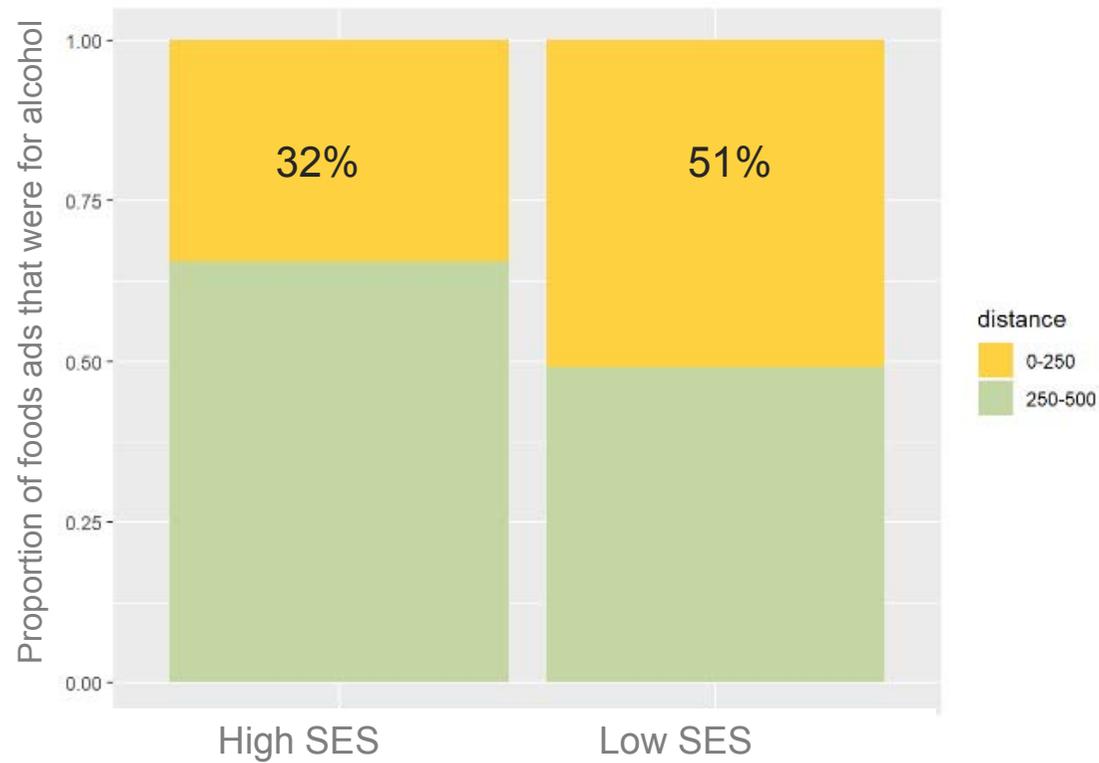
Results: Proportion of ads by SES and distance

Schools located in LOW SES areas had a significantly higher proportion of:
- **unhealthy food ads (excl alcohol) within 250m (vs 250-500m)**

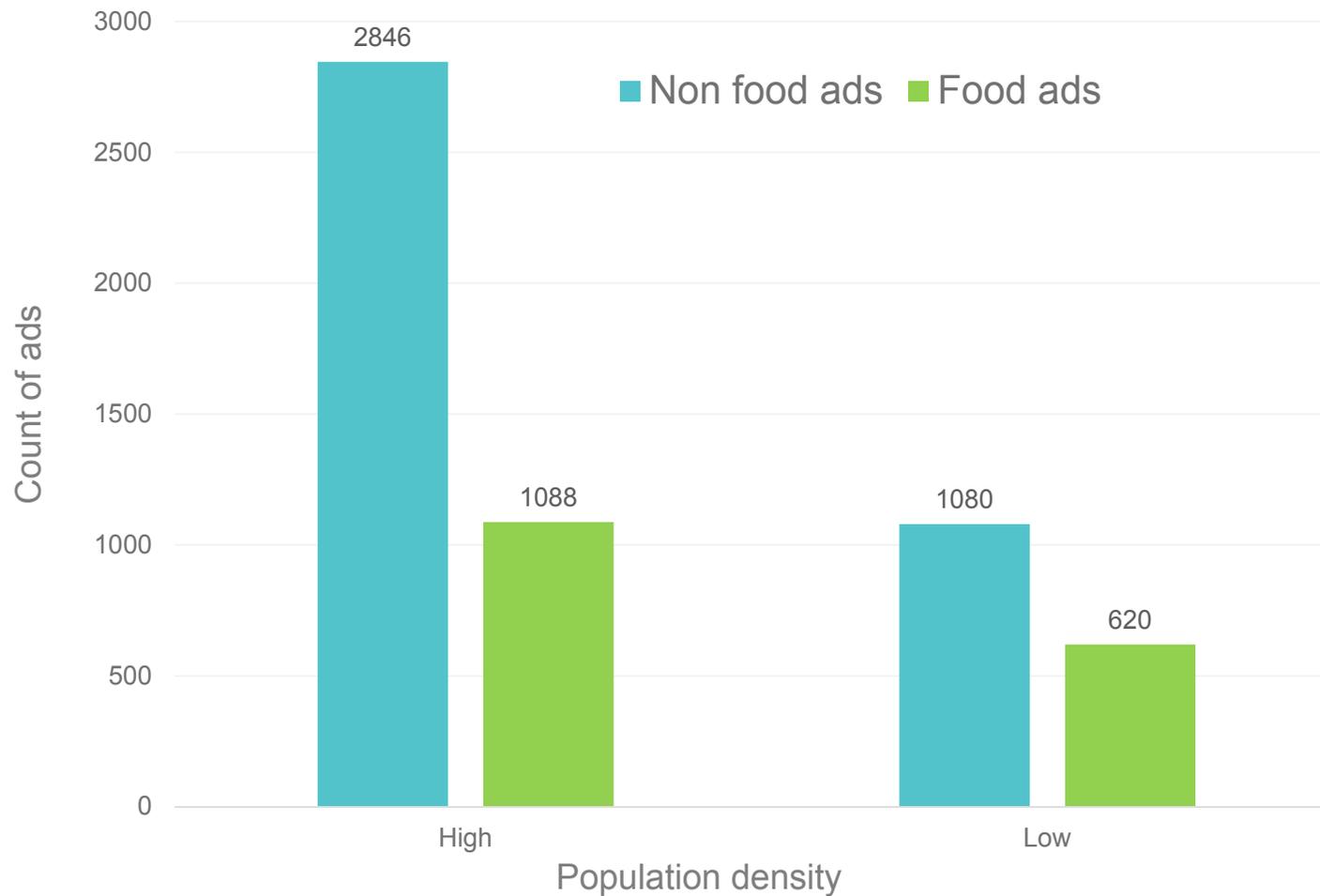


Results: Proportion of ads by SES and distance

Schools located in LOW SES areas had a significantly higher proportion of:
- **alcohol ads** within 250m (vs 250-500m)



Results: Total number of ads within 500m by population density

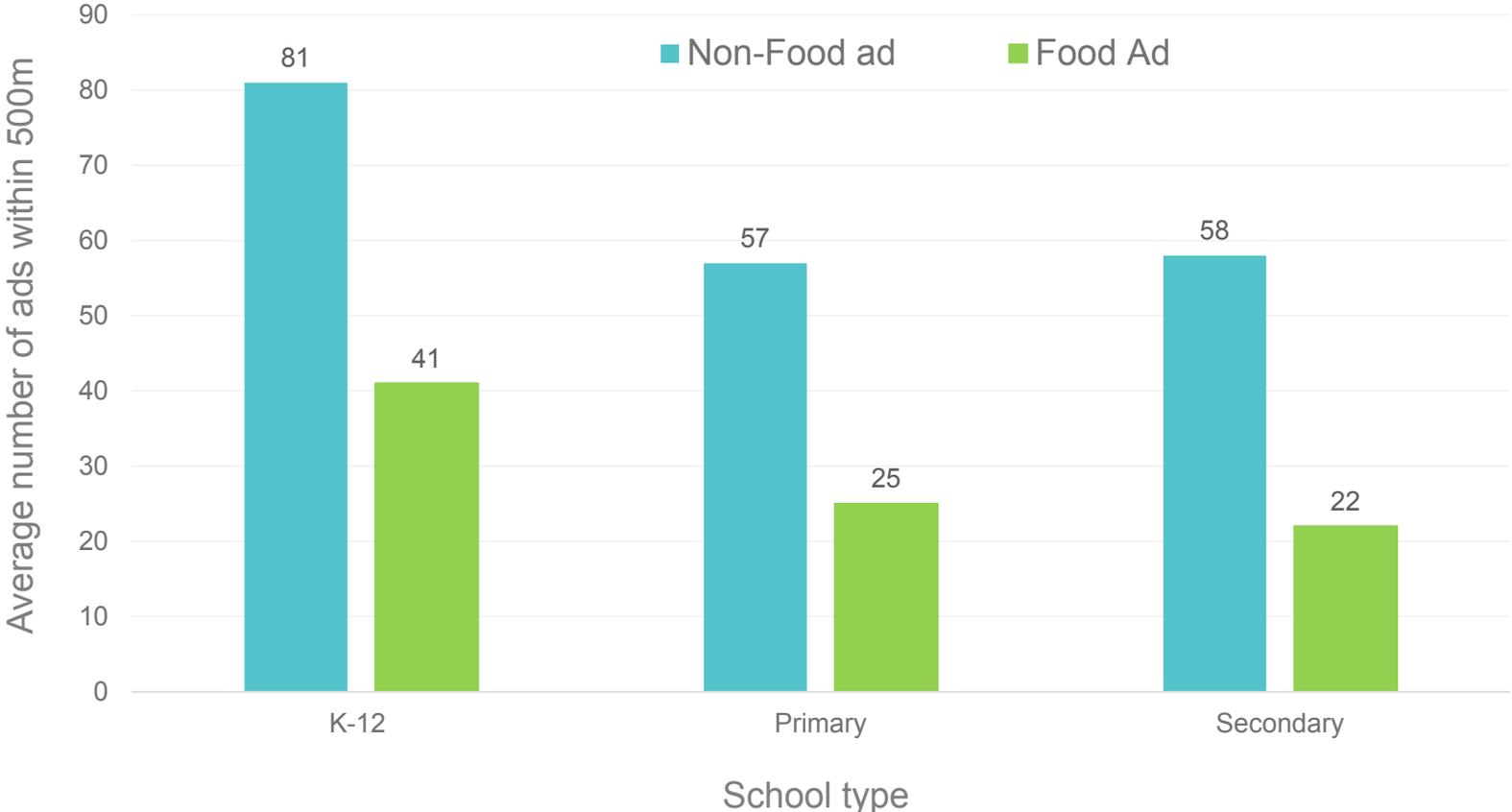


More non-food and food ads in high population dense areas

Proportion of food ads to non-food ads higher in low population-dense areas

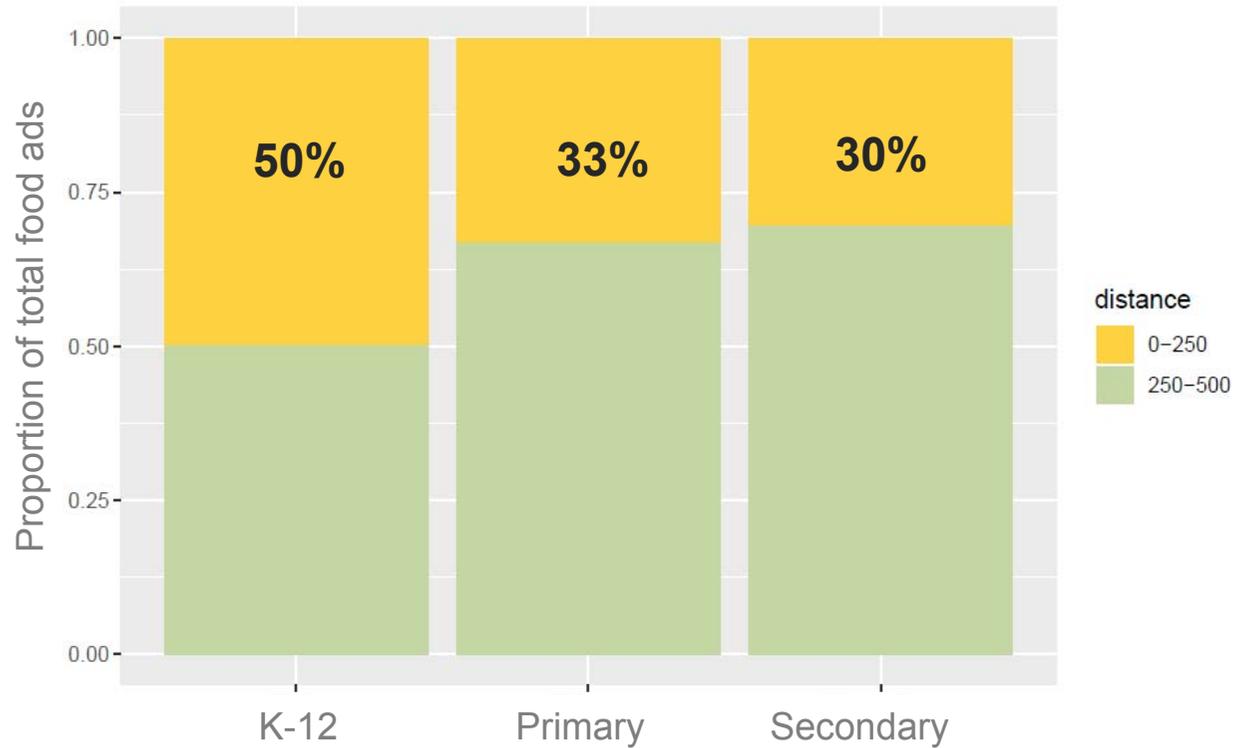
Content of food ad (healthy, unhealthy, branding, misc) was not significantly different between high/low population dense areas

Results: Average number of ads within 500m by school type



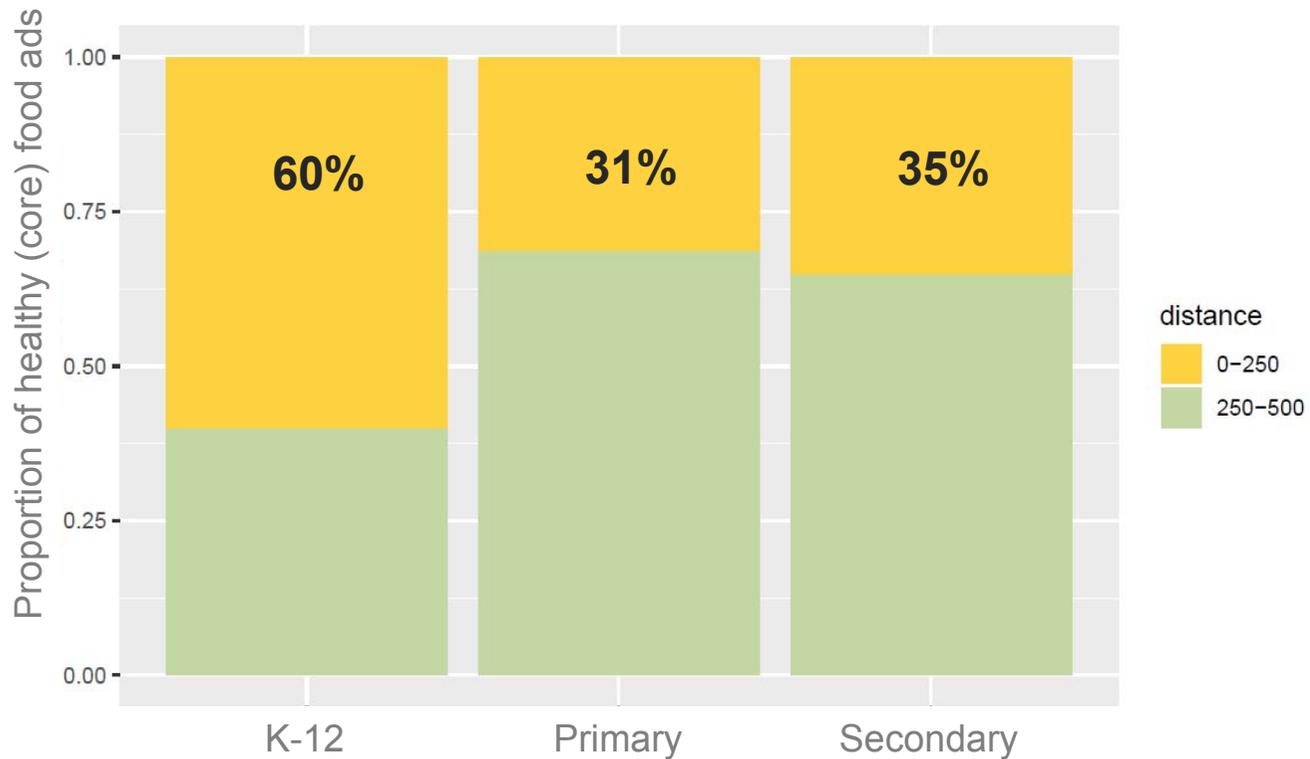
Results: Proportion of ads by school type and distance

K-12 schools had a significantly higher proportion of:
- **total food ads** within 250m (vs 250-500m)



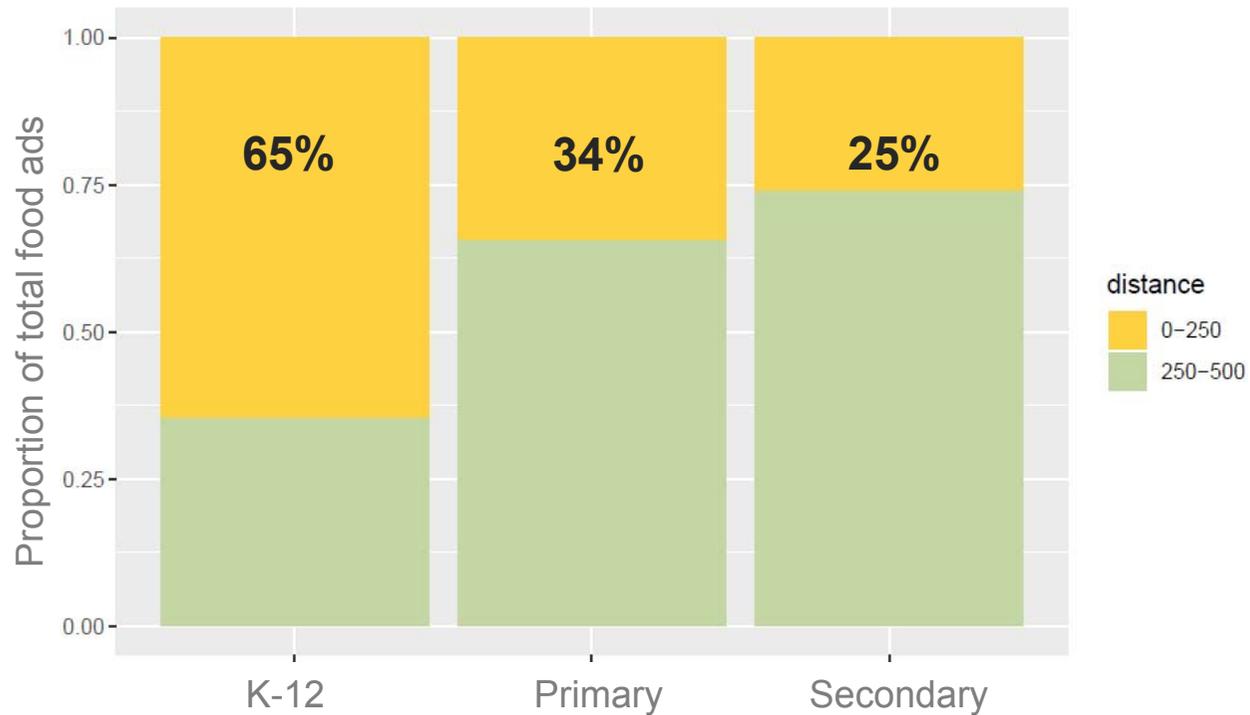
Results: Proportion of ads by school type and distance

K-12 schools had a significantly higher proportion of:
- **healthy (core) food ads** within 250m (vs 250-500m)

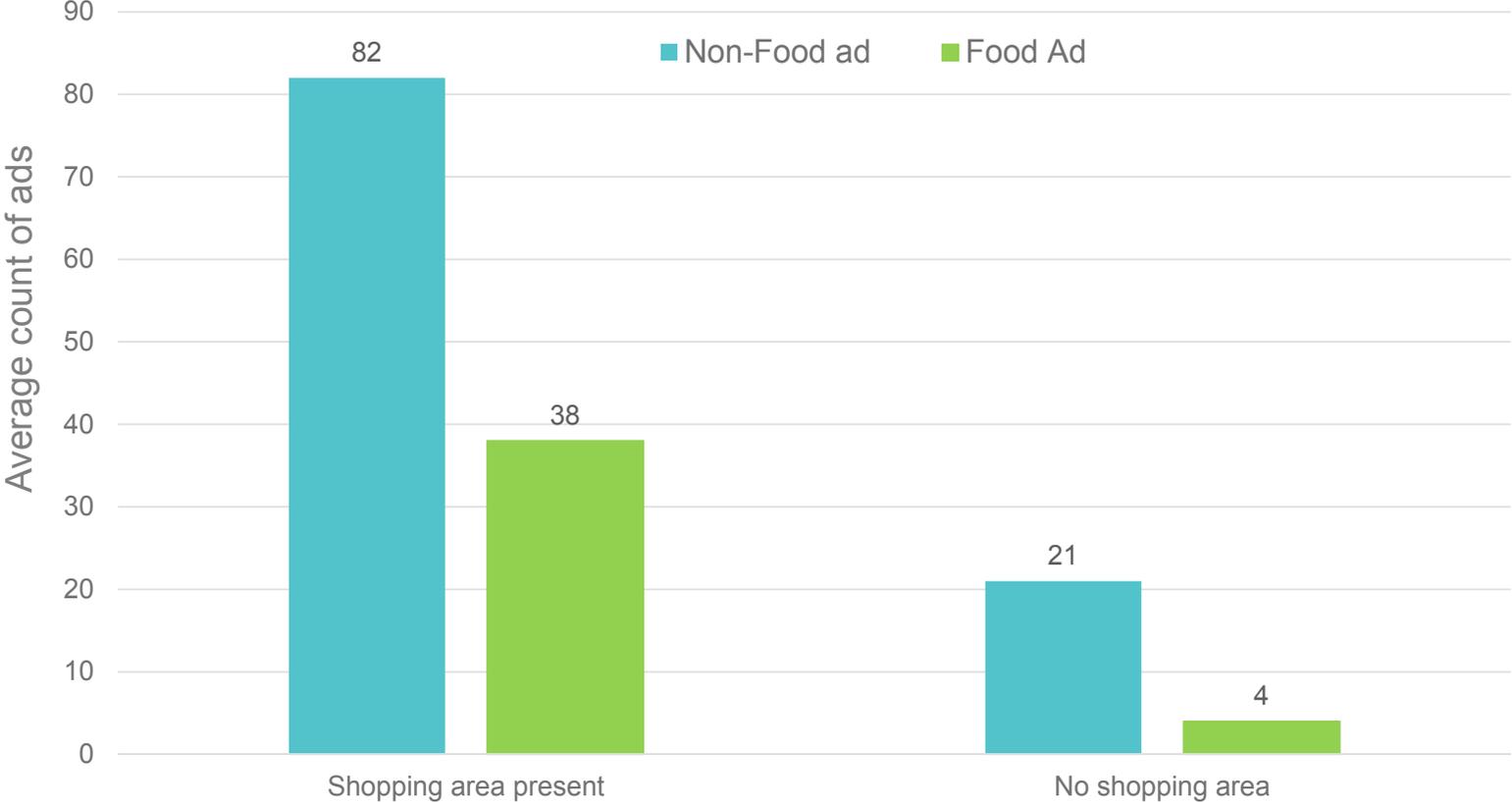


Results: Proportion of ads by school type and distance

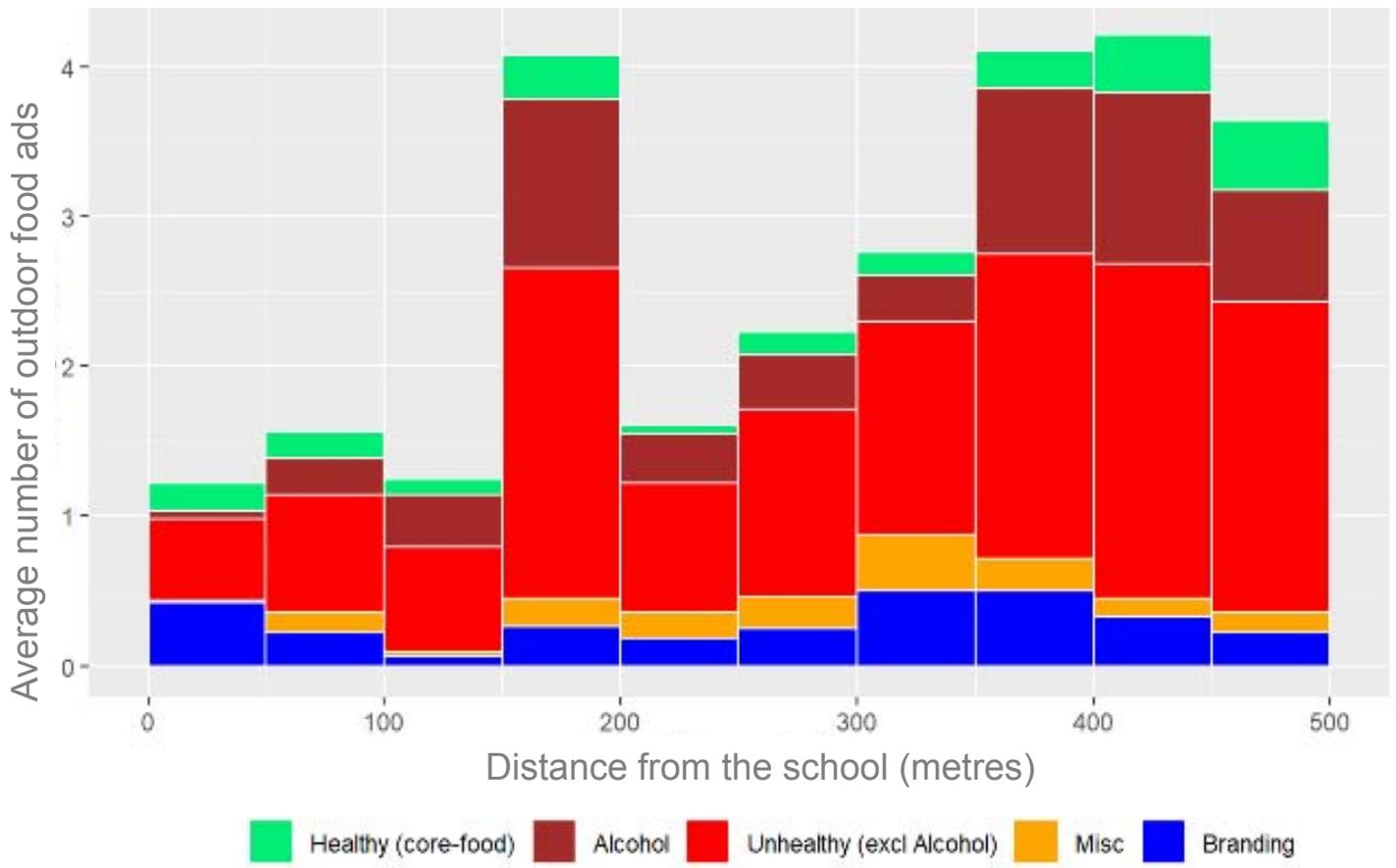
K-12 schools had a significantly proportion of:
- **alcohol ads** within 250m (vs 250-500m)



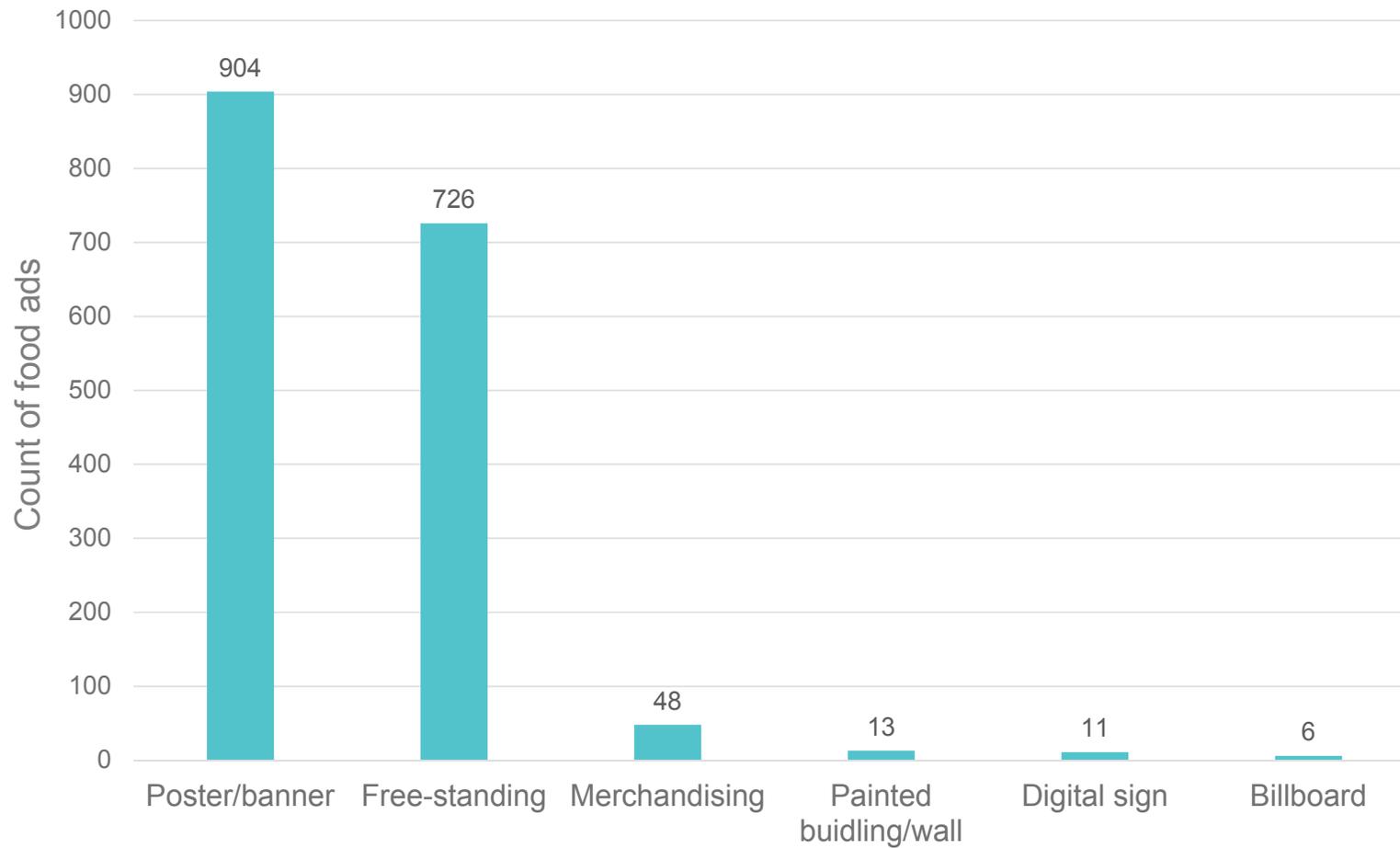
Results: Average count of ads within 500m by presence of shopping area



Results: Average number of food ads by ad content and distance

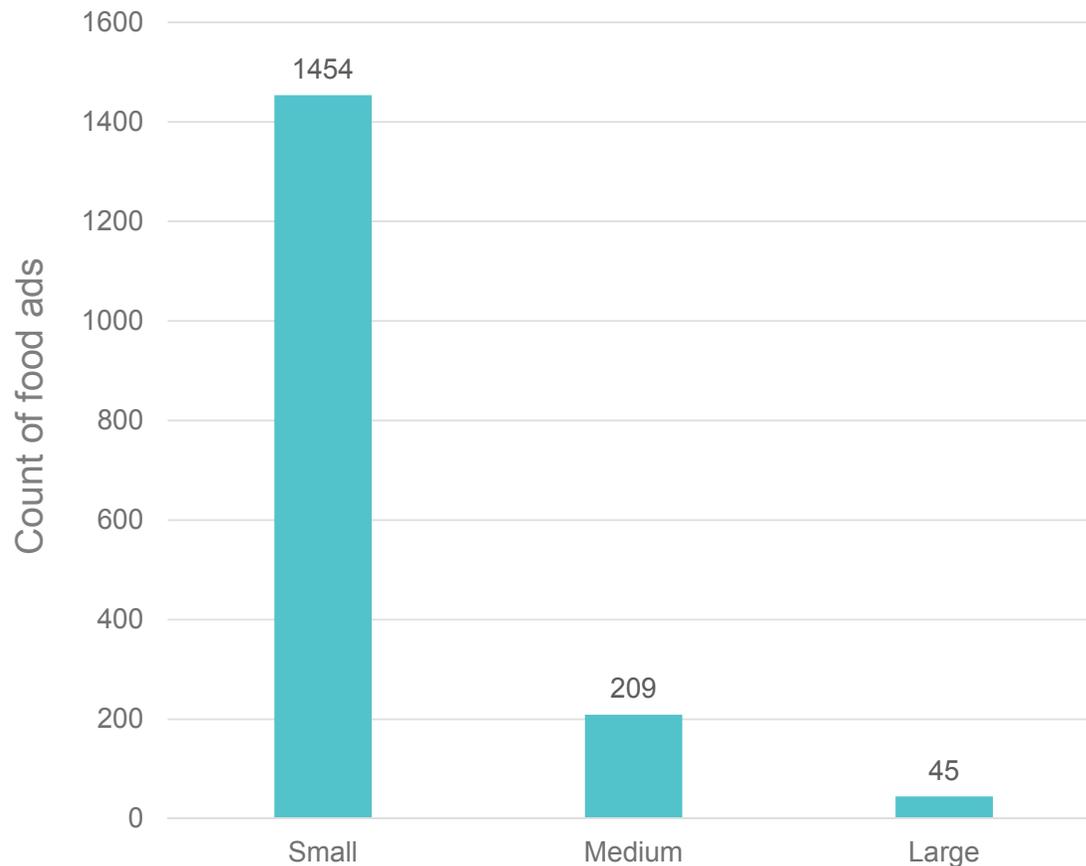


Results: Count of outdoor food ads within 500m by ad type



This pattern of results was consistent across all school types, SES and population density

Results: Size of outdoor food ads within 500m of all schools



Small outdoor food ads

75% unhealthy (non-core)

Most frequent = alcohol (25%)

Medium outdoor food ads

70% unhealthy (non-core)

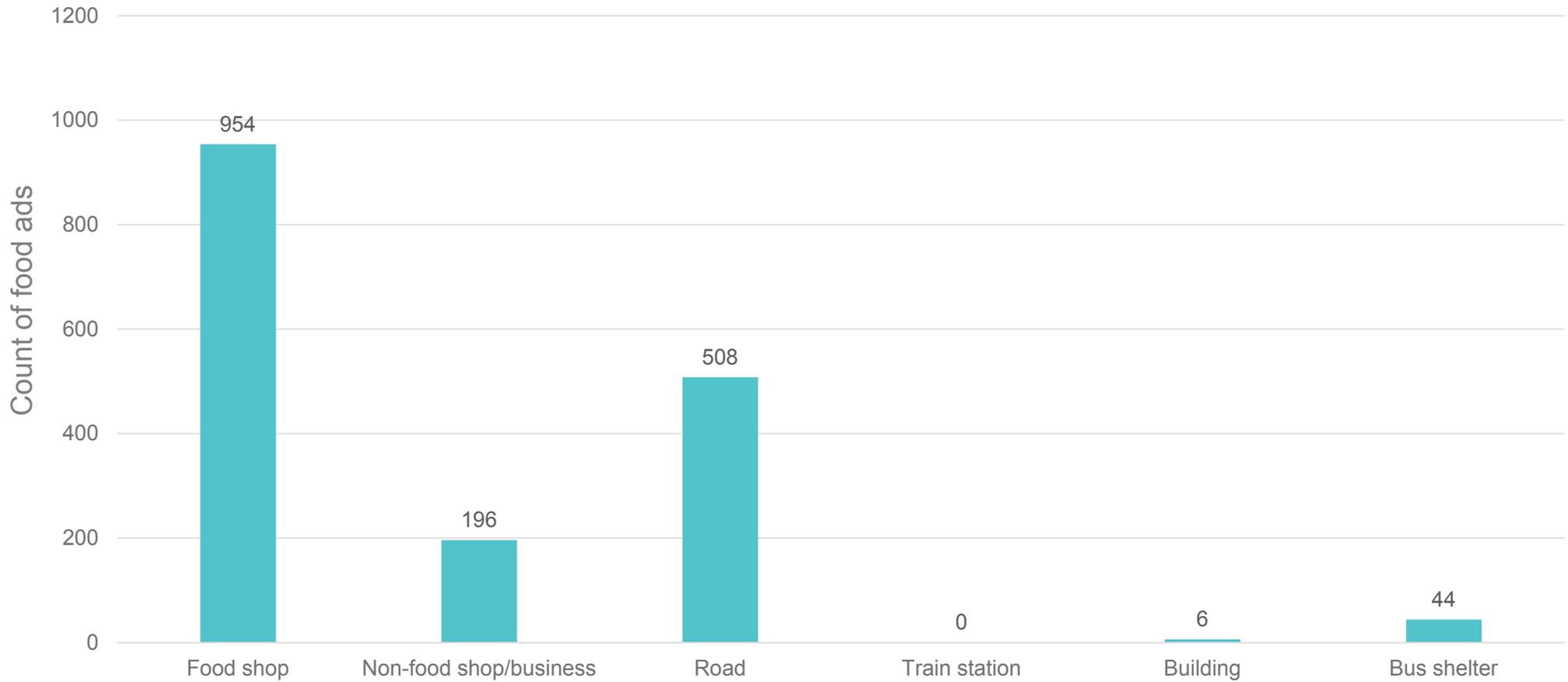
Most frequent = alcohol (19%)

Large outdoor food ads

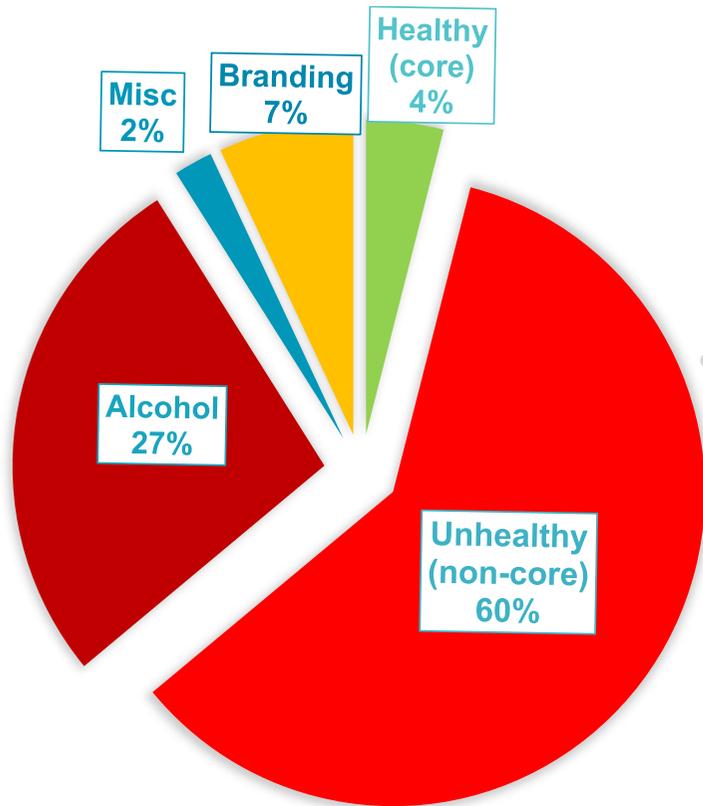
66% unhealthy (non-core)

Most frequent = alcohol (34%)

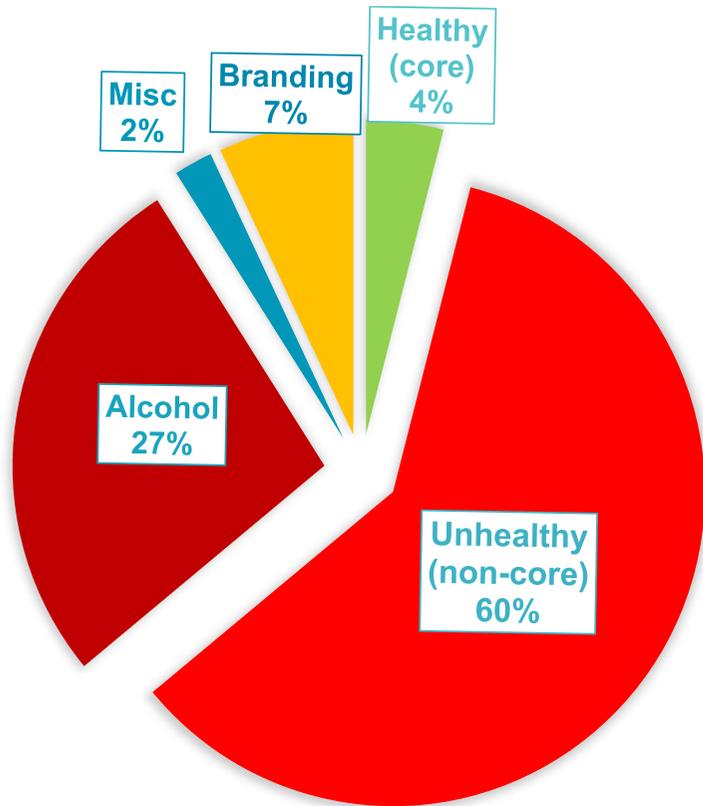
Results: Count of total food ads within 500m by setting



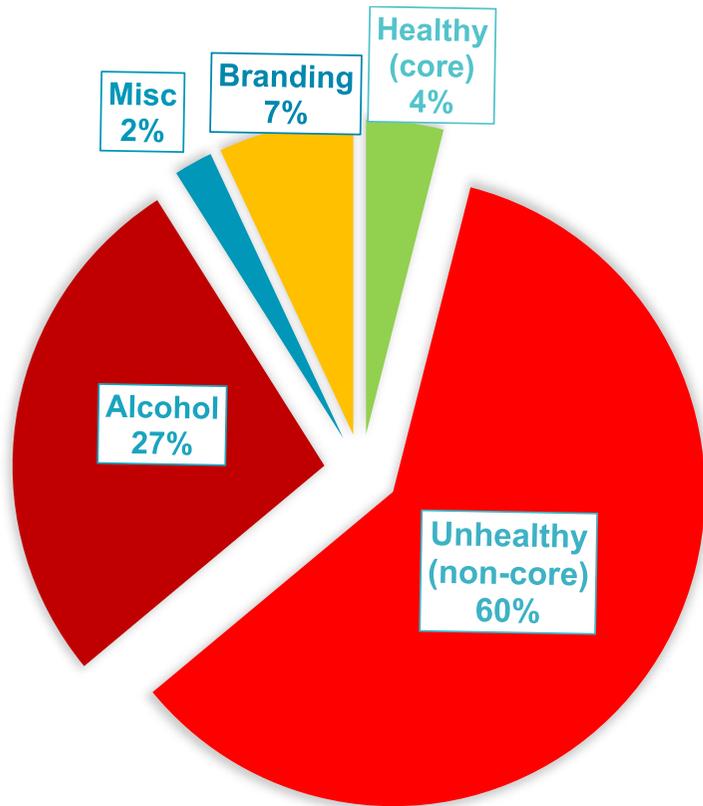
Results: bus shelter food ads



Results: bus shelter food ads



Results: bus shelter food ads



KEY FINDINGS

74% of outdoor food advertising within 500m of Perth schools was for unhealthy food

Alcohol

was the most frequently advertised food product, followed by fast food and sugar sweetened beverages

9x as many ads for unhealthy foods than healthy foods

Low SES areas

had a higher proportion of total food ads, unhealthy food ads and alcohol ads (but not healthy ads) within 250m of schools





KEY FINDINGS

Primary

schools had an average of 25 outdoor food advertisements (range=0-190)

Secondary

schools had an average of 22 outdoor food advertisements (range=0-94)

K-12

schools had an average of 41 outdoor food ads (range=0-116) and a significantly higher proportion of total food ads, healthy and alcohol ads within 250m

87%

of food ads on bus shelters were for unhealthy (non-core) foods including alcohol

The majority of food ads were located at a

Food shop or road

Implications for policy & practice

We need a comprehensive mix of strategies to reduce unhealthy food advertising near schools



Revise national advertising industry codes

To impose restrictions on the density/type/content of advertisements that surround schools



Changes to the Dept. of Planning's guidelines for advertising on transport corridors

To impose restrictions on unhealthy food/alcohol advertisements



Create healthy food zones near schools

Changes to land use and zoning policies to restrict unhealthy food/alcohol outlets near schools



Changes to Local Government Local Planning Policies

To contain provisions relating to the guidance or regulation of food/alcohol advertising



Remove unhealthy food & alcohol advertising from all state-based assets

Including billboards, digital/LED signs and bus shelters, which contain a high proportion of unhealthy food ads including alcohol

THANK YOU

For more information

gina.trapp@telethonkids.org.au



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