Supplementary File 2: Summary of included studies*

Study	Study Design (quality)	Location (rurality)	Duration	Targeted/ Universal	Participants**	Intervention	Indigenous involvement?	Outcomes	Differential impact?
Gorton et al. 2009	Cross- sectional survey (moderate)	New Zealand (urban)	3 months (5 years post policy)	Universal	1525 adults: 26% Māori 72% female mean age: 41 years	Comparing mandatory Nutrition Information Panel, multiple traffic light (MTL), simple traffic light (STL) and percentage of daily intake (%DI) labels.	None described	Label use: Nutrition Information Panel used correctly to identify healthy food by 36% (95% CI 32, 41%) of Māori and 64% (95% CI 60, 69%) of European New Zealanders. %DI used correctly to identify healthy food by 32% (95% CI 28, 37%) of Māori. 50% of Māori selected 'I don't know when using %DI label.	Traffic light labels were best understood across all ethnic and income groups. [data for Māori participant s not shown]
Ni Mhurchu et al. 2017	RCT (high)	New Zealand (urban & rural)	5 weeks	Universal	1255 adults 18% Māori 89% female mean age: 33 years	Starlight Trial: Comparing mandatory Nutrition Information Panel (NIP), Traffic Light Label (TLL) and Health Star Rating (HSR) labelallocated using mobile phone application with barcode scanner.	None described	Food purchasing: Overall differences in healthiness of food purchases not statistically significant. Frequent app users had significantly better nutrient profiling scores using TLL - 21.33 (95% CI: -22.63, -20.04) and HSR - 21.70 (95% CI: -22.97, -20.43) compared with NIP.	Effects did not vary by ethnicity (P-all interaction terms < 0.05).

Ni Mhurchu et al. 2018	(high)							Food purchasing: Overall, products participants purchased after viewing the label were healthier than products whose labels were viewed, but not purchased. Mean difference in nutrient profiling score -0.90 (95% CI - 1.54 to -0.26) Food purchasing:	Effect did not reach significance for Māori and Pacific participant s. Difference in nutrient profiling score: - 0.47 (95% CI -1.81, 0.88) Indigenous
Foundation 2019	Cross- sectional survey (low)	Australia (urban and rural)	4 years	Universal	7481 Australian adults (3.3% Aboriginal or Torres Strait Islander	Health Star Rating interpretive food labelling system (voluntary)	none given	64.4% of respondents reported that the Health Star Rating system influenced their purchasing behaviour. Of those influenced by the system, > 50% stated that they selected a healthier product. Overall, 23.4 % of all consumers reported selecting a product with more stars.	peoples significantl y more likely than non- Indigenous participant s to report that HSR influenced purchasing decisions. (72.9% vs. 63.8%)
Gustafson & Prate 2019	Cross- sectional survey (moderate)	United States of America of America (rural)	Single survey (over 3 days)	Targeted	115 Native American adults 71% female mean age: 42 years	Comparing generic label, a culturally tailored label (image + text) and tailored image only.	Local members of research team involved in label design. Protocol approved by	Food purchasing: Tailored label increased selection of the healthy item (p<0.001) and decreased selection of the unhealthy item	Generic label also increased selection of healthy item (p<0.001)

O Offer has					ns and other spo	aific achtings	tribal authorities	(p<0.001). The tailored label significantly influenced the willingness to pay for a healthy product: \$2.44 more than when no label is present.	but was less effective at influencing willingness to pay for healthy item.
Study	Study Design (quality)	Location (rurality)	Duration	Targeted / Universa	Participants**	Intervention	Indigenous involvement?	Outcomes	Differential impact?
Preschools/Ch	ildcare Centres								
Davis et al. 2016	RCT (moderate)	United States of America (rural)	Intervention: 5 years Study: 2 years	Targeted (Native America n & Hispanic)	980 pre-school children (intervention: n=500, control n=480); 38% Native American; 47% female; age: 2-5 years	Centre food service policy and professional development for staff; fruit and vegetable tasting for children (multicomponen t intervention, also nutrition and physical activity curriculum, takehome materials, family events; healthy options in stores) Cultural	Cultural considerations in program curriculum. "Strong support" from families and community members	Anthropometry: No significant difference between comparison and intervention centres (p = 0.54; comparison slope = 0.038 [95% CI, 0.014 to 0.063]; intervention slope = 0.039 [95% CI, 0.014 to 0.063]; difference = 0.011 [95% CI –0.024 to 0.046]).	No heterogeneit y of intervention effect was observed with respect to centre race/ethnicit y (p = 0.38), gender (p = 0.41), or race/ethnicit y × gender (p = 0.32).

Gagne et al. 2013	cross- sectional (moderate)	Canada (remote)	2 years	Targeted	217 Inuit children (attending childcare n=128, comparison n=89); 48% female; age: 11 months – 4.5 years	Childcare centre menu (breakfast, lunch, and midafternoon snack) containing traditional foods and healthy store-bought foods; policy regarding foods and beverages served and staff training. (Also nutrition education)	"Collaboration with many individuals and organizations in Nunavik" Inuit interpreter available during evaluation.	Diet: Children attending centre had a significantly ↑ intake of omega-3 (0.8% vs 0.5%), calcium (953 vs. 774mg), iron (11.2 vs. 8.1mg), as well as vegetables, fruit, grains milk and alternatives; more likely to meet core food group recommendations and iron RDI (p<0.0001)	N/A
Rush et al. 2017	Quasi- experiment al (Low)	New Zealand (urban & rural)	3 years	Universal	18744 New Zealand pre- school children (intervention: n= 6090, comparison: n=12,684); 31- 34% Māori; age: 4 years	Childcare centre action plans: menu-planning, lunchbox/ snack guidelines, providing water only (Also: workshops with educators and parents, class activities, interactive displays, newsletters/ printed resources, active play)	Two Māori facilitators	Anthropometry: No change in obesity. Health Outcomes: For Māori, dental decay ↓ from 19.2% to 15.7% in intervention centres (trend p = 0.02), vs. nonsignificant ↓ from 21.5% to 20.2% among Māori in control centres. Difference by year three (8.7%:10.7% p = 0.026).	Prevalence of dental decay decreased significantly in non-Māori children regardless of centre attendance, but decline was steeper at intervention centres (\$\subseteq\$ from 6.4% to 4.2% vs. 6.9% to 5.4%,trend p = 0.01 for both).

rimary/Elem	entary schools	T		1	T			T	1
Caballero et Il. 2003	RCT (high)	United States of America (rural)	3 years	Targeted	1704 Native American school children (intervention: n=879, control: n=825); 48.3% female; mean age: 7.6 years	Pathways Study: School food service guidelines and tools for reducing the fat content of school meals (part of multicomponent intervention, also included nutrition and	Community-based formative research at each site. Project Steering Committee included two American Indian representatives elected by all American Indian study personnel.	Anthropometry: No significant difference Diet: Intervention group ↓ total energy intake (mean difference - 265kcal 95%CI - 437,-93) and ↓ % energy from total fat (mean difference -2.5% 95%CI -3.91.1) based on 24h recall. Intervention group observed to ↓ fat intake from school lunch but no difference in lunchtime energy intake b/w groups.	N/A
Himes et al. 2003	RCT (moderate)	United States of America (rural)	3 years	Targeted	470 Native American school children (intervention: n= 233, control: n= 247); 2 nd & 5 th grade	physical activity curriculum, take- home materials and family events)	cultural principles, practices and learning modes.	Diet: Based on lobservations, intervention group significantly ↓% energy from fat by 3.6% (SE 1.6, p<0.05) and saturated fat by 2.1% (SE 0.7, p<0.01) and a significantly ↑% energy from	N/A

								carbohydrate (3.7% SE: 1.7). Intervention children reported lower 24-h intakes of energy (263 kcal, SE: 86, p<0.01), protein (9.5 g, SE 3.4p<0.01), total fat (15.1g, SE 4.1 p<0.001), saturated fat (6.0 g, SE 1.5, p<0.001), and polyunsaturated fat (2.3 g, SE 0.9, p<0.05); and % energy from fat (2.5%, SE 0.7, p<0.001) and saturated fat (1.1% SE 0.3 p<0.001).	
Rush et al. 2012	RCT (moderate)	New Zealand (urban &rural)	2 years	Universal	1352 New Zealand primary school children (intervention: n=692, control: n=660); 26% Māori; 49% female; aged 5 (n=926) or 10 (n=426) years	Project Energize: School canteen makeovers, healthy fundraising. (+school curriculum and modelling the preparation of	None given	Anthropometry: Intervention ↓ accumulation of body fat % SDS in the younger children (-0.14% (95% CI: -0.26 0.01). No effects on BMI SDS and %BF SDS in the older sample.	Māori subgroup analysis showed no effect of intervention. Over 2 years, Māori children had a non- significantly greater

						healthy lunches and snacks on a budget, information for parents professional development with a dietitian +	Health Outcome: Intervention associated with ↓rate of ↑ in systolic BP SDS (- 0.23, 95%CI: -0.430.02, p=0.03) in older children.	increase in BMI, %BF and BP than Europeans.
Rush et al. 2014	Quasi- experiment al (low)	New Zealand (urban &rural)	6 years	Universal	6629 New Zealand primary school children (intervention: n= 4804 historical comparison group: n=1825); 36% Māori; 52% female; mean age 7.6 (younger group), 10.3 (older group)	physical activity)	Anthropometry: Adjusted BMI was significantly lower in the intervention children compared to historical controls. Younger children were 31% (OR: 0.69, 95%CI: 0.54-0.88) and older children were 15% (OR: 0.88, 95%CI: 0.72-1.00) less likely to be obese or overweight than historical controls. Difference in BMI SDS: -7 (95%CI: -10.13.6) in younger children and -4.4 (95%CI: -8.54.7) in older children.	Intervention showed favourable, statistically significant outcomes among Māori children. No significant interaction between the intervention exposure and ethnicity observed for any outcomes suggesting intervention had similar relative effect among the different ethnic and SES groups.

Hanbazaza et al. 2015	Quasi- experiment al (low)	Canada (rural)	2 school years	Targeted	116 First Nations school children; 50% female; mean age: 9.8 years	School snack program: One raw food offered weekly to all children in year 1. Daily tastetesting of vegetables and fruit in year 2; incorporation of vegetables into school lunches. Garden boxes in each classroom Produce harvested used for classroom activities	Project arose from concerns within the community about children's health. Community Elders involved in planting garden boxes. Community control over the research process. Research committee included Elders, educators, health workers, and other community representatives.	Diet: No significant changes in the home food consumption of any vegetable or fruit.	N/A
Jones & Smith 2006	Quasi- experiment al (Low)	Australia (rural)	6 months	Targeted	15 Aboriginal primary school children	Fresh fruit provided once or twice/school day at morning tea and lunch At least one piece of fruit per student each school day.	In response to need identified by the Aboriginal Medical Service	Health outcomes: All 12 children who completed both points of testing had slight or greater hearing loss at baseline. Five (42%) had improved hearing at 6 months and seven (58%) had no change. Mean antibiotic prescriptions decreased from 7 to 1 per month.	N/A

Jones & Smith 2007	Quasi- experiment al (Low)	Australia (rural)	3 years	Targeted	12 Aboriginal primary school children			Nutritional status: Mean vitamin C level ↑ from 21.9 μmol/L to 41.7 μmol/L. 44% (4/9) in the normal range, whereas 11/11 (100%) were deficient at baseline. Health outcomes: % with normal hearing ↑ from 5/12 (42%) to 9/11 (82%) post intervention.	N/A
Kakekagumic k et al. 2013	Quasi- experiment al (Low)	Canada (remote)	Study 1: 12 months Study 2: 18 months	Targeted	Study 1: n= 138; Study 2: n= 47 First Nations school children; 3 rd & 4 th grade	School snack program consisting of fruit, milk, cheese, and rice cakes; school wide ban on high-fat and high-sugar foods and drinks. (Part of multicomponent intervention: school-based curriculum; healthy options and nutrition information in the store, physical activity)	Program initiated by Community. Cultural considerations in intervention. Guidance and input from Elders. Two community members are coauthors. Program provided training and employment opportunities for a large number of community members.	Anthropometry: Mean BMI z-score ↑ from 1.0 to 1.3 (p=0.001). WC ↑ from 74.8 to 84.1 (p<0.001), Mean % body fat ↑ from 32-35%, p<0.001. Diet: Dietary fibre ↑ significantly from 11.6±8.0 to 13.4±8.0. No significant ↓ in fat intake.: Milk intake ↑ from 0.8 serves (SE 0.2 to 1.1 (SE 0.2) % of energy from sugar ↓ from approx. 30% to < 25%.	

Paradis et al. 2005	Quasi- experiment al (Moderate)	Canada (rural)	8 years (2 years with comparison group)	Targeted	657 First Nations school children (intervention: n= 458 comparison: n= 199); grade 1-6	School nutrition policy: ban of junk foods sold on or brought onto school premises (Part of multicomponent intervention. Also, health education, physical activity curriculum, community media advertisements, family activities)	Program initiated by the community. Program supports capacity development of First Nations staff, volunteers and community members. Community held to return the results to the community, allow community input into interpretation of findings, and plan future directions of the project.	Anthropometry: Slower ↑ in skinfolds in intervention group: 36% vs. 65% (p <0.01). No difference in adjusted BMI increase. Students in 2002 had significantly ↑ risk of having higher BMI and skinfold thickness vs. baseline. Diet: No significant difference in nutrition measures between groups. Trend over 8 years: ↓ risk of consumption of high-sugar/high fat food items 65% (Fat OR: 0.35 (95%CI: 0.25–0.47) to 70% (sugar OR: 0.29 95%CI: 0.21–0.39) Fruit and vegetable intake also ↓ (OR: 0.25 95%CI: 0.18–0.35). Anthropometry:	N/A
2012		States of	2 years	Ŭ	American school	staff were	assessment with	No significant	N/A

	(moderate)	America			children	trained to	Lakota	change in mean	
		(rural)			(intervention:	provide low-	parents/caregiver	BMI, BMI-Z,	
					n=267, control:	calorie/fat	s, community	skinfolds or %	
					n= 187); 48.9%	foods, more	members, and	body fat or obesity	
					female; mean	fruits and	elders.	prevalence.	
					age: 5.8 years	vegetables,		Intervention	
						portion control.	Trained Lakota	associated with a	
						Teachers trained	research staff	significant net ↓	
						to limit daily		of 10% in the	
						snacks in the		prevalence of	
						classroom,		overweight (effect	
						students		size -10.14 se:	
						encouraged to		4.14). Difference	
						drink water.		in incidence of	
						Non-food		overweight of	
						rewards e.g.		-11.4% (P =	
						stickers, stamps,		0.033).	
						pencils.		·	
								Diet: Intervention	
						(Part of		group	
						multicomponent		significantly↓	
						intervention.		intakes of SSB (-	
						Also: family		0.28 times/day,	
						events nutrition		se: 0.11), whole	
						information for		milk (-0.22	
						parents, give-		times/day, se	
						aways + physical		0.07) and	
						activity)		chocolate milk (-	
								0.17 times/day, se	
								0.06).	
	Cross-	New	8 years	Universal	3813 New	School 'water		Health Outcomes:	Māori
	sectional	Zealand			Zealand primary	only' policy,		mean no. carious	students at
Thornley et	survey	(urban)			school children	provided free	not given	teeth 0.37 lower	intervention
al. 2017	Survey				(intervention:	water bottles for	not given	(95% CI: 0.09-	school had
	/ \				n= 428,	students, and		0.65) in	lower levels
	(moderate)				comparison: n=	modelling and		intervention	of caries than

					3385); 21% Māori; 47.0% female; age: 8- 11 years	reinforcing healthy eating behaviour among students and parents.		school, compared to other schools. School policy estimated to prevent 20 carious teeth /year (95% CI: 5–35).	those in other schools. Interaction terms between school and ethnicity not significant.
Triador et al. 2014	Quasi- experiment al (Low)	Canada (rural)	7 months	Targeted	76 First Nations Children; 47% female; mean age: 9 years	7-month classroom gardening + 4- month weekly snack program offering fruit or vegetable to each child		Diet: Non significant ↑ consumption of 10/17 vegetables and fruit between baseline and follow-up p >0.25	N/A
Vogeltanz- Holm et al. 2018	Quasi- experiment al (Moderate)	United States of America (rural)	3 years	Universal policy + Targeted educatio n	308 primary school children, 34% Native American, 51.9% female; mean age 8.75 Compared to national sample without any Indigenous children (n= 208 at baseline, n= 356 at f/u)	Healthy school meals - reduced fat, saturated fat and sodium (Also, school curriculum, takehome materials, family/ community nights, field trips to grocery store)	Research team included American Indian postdoctoral fellow. Partnered with tribal health leaders to adapt survey questions	Anthropometry: Significant ↓ in zBMI from 0.72 (95%CI 0.63, 0.81) to 0.63 (95%CI 0.54, 0.72). Obesity rates ↓ from 15.9% (95%CI 11.8, 20.0) to 12.7% (95%CI 9.0, 16.4) in intervention. No change in obesity in control group.	White students ↓ zBMI (0.66 to 0.61). Native American students' zBMI ↑ from baseline to 12 months (0.82 to 0.93) but did not differ from baseline at 3 years (0.82 to 0.85).

Saksvig et al. 2005	Quasi- experiment al (low)	Canada (remote)	1 school year	Targeted	122 First Nations school children; 45% female; age: 7- 14	School policy banning high-fat and high-sugar snack foods, breakfast snack program providing daily fruit for students. (Part of multicomponent intervention. Also school curriculum, weekly radio show, information for parents + physical activity)	School and community leaders involved in program development. Native American learning styles incorporated.	Anthropometry: Mean BMI ↑ significantly from baseline by 0.95kg/m2 (SD: 1.3) and % body fat ↑ by 1.18% (SD 4.0) Diet: % energy from fat ↓ for boys (34% vs. 31%; P < 0.05), but not for girls (34% vs. 33%; P< 0.2). No difference in the % energy from saturated fat or energy intake. Intervention exposure associated with meeting dietary fibre RDI (p<0.01).	N/A
Gates et al. 2013a	Quasi- experiment al (Low)	Canada (remote)	1 school year	Targeted	30 First Nations school children; 67% female; age: 11-15 years	Healthy breakfast and snacks provided daily, community feast (also nutrition curriculum)	Students involved in planning community feast Program coordinator = community member and former teacher	Diet: No significant change in intake of milk/alternatives, calcium or vitamin D post program.	N/A

Gates et al. 2013b	Quasi- experiment al (Low)	Canada (remote)	12 months	Targeted	113 First Nations school children; 55% female; age: 11- 14 years	School snack program: at least one serve of vegetables and fruit, and milk and alternatives provided daily. An existing snack program was supplemented with milk and alternatives in a second school.	After one week control of the program was then handed over to a local volunteer	Diet: No significant change from baseline in any of the dietary variables at 12 months. In the short term (1 week) calcium intake ↑ from 805.9 ± 552.0mg to 1027.6 ± 603.7 (p = .044) (school 1). Milk and alternatives ↑ from 1.7 +/- 1.7 to 2.1 +/-1.4 serves, p=0.034) and vitamin D intake ↑ from 2.5ug +/- 2.6 to 3.5ug +/- 3.4, p=0.022) improved in the short term (school 2).	N/A
Ritenbaugh et al. 2003	Quasi- experiment al (moderate)	United States of America (rural)	3 years	Targeted	109 high school students (Intervention: n= 72 Native American, comparison: n= 37 Anglo students); Intervention group: 57% female; mean age: 17	School nutrition policy: water coolers for students; vending machine with diet drinks, only healthy snacks and sugar free beverages in the Wellness Centre. Increased fruits	Community representatives worked with the authors to on development, implementation, and evaluation of the project	Anthropometry: No significant differences in BMI Diet: SSB consumption ↓ by 4.8 oz./day/ student replaced by 24 oz. water and 7.8 oz. diet	By year 3, insulin values for males equalled Anglo comparison values, females' had declined but were still higher than Anglo values

				Targeted	Study 1: 63 First	and vegetables and decreased fat in school lunches. (Also, nutrition and diabetes prevention curriculum, information displays and local radio announcements)		soda/week/studen t. Health outcomes: Plasma insulin levels declined through-out the study (p = 0.06 to p= 0.000 for trends). Diet: Study1:	
Skinner et al. 2012	Quasi- experiment al (Low)	Canada (remote)	3 years	Targeted	Study 1: 63 First Nations school students (intervention: n=23, comparison: n=40); Study 2: 50 First Nations students (intervention: n=26, comparison: n=24); 57% female; age: 10- 18 years	School snack program: provided morning breakfast snack to all students and an afternoon (fruit/milk) snack to all elementary students each school day. Traditional foods sometimes offered during special events.	Dedicated 'program champion' and widespread community support	Participants had higher fruit and vegetable (7.5 vs 3.4 serves), folate (420 vs 270 μg), fibre (18 vs 8 g), vitamin C (223 vs 94 mg), calcium (1055 vs 719 mg) and iron (16.5 vs 11.7 mg). Study 2: participants had higher intakes of milk (3.3 vs 2.2 serves), vitamin A (697 vs 551 RE) calcium (1186 vs 837 mg), vitamin D (6.9 vs 4.4 μg) ↓ intakes of 'Other' foods (6.0 vs 7.2 serves)	N/A

Study	Study Design (quality)	Location (rurality)	Duration	Targeted / Universa	Participants**	Intervention	Indigenous involvement?	Outcomes	Differential impact?
Subsidies/dis	counts	·L	l		1	1	1		l
Black et al. 2013	Quasi- experiment al (moderate)	Australia (rural)	12 months	Targeted	174 Aboriginal school children, 53% female, mean age: 7.6 years,	Each family paid \$5 for a weekly box containing \$40-\$60 worth of fruit and vegetables. Mandatory bread flour fortification with folic acid occurred concurrently	Initiated by the Aboriginal Health Service. Aboriginal health workers led health promotion Initiated by the Aboriginal Health Service. Aboriginal health workers led health promotion Initiated by the Aboriginal Health Service. Aboriginal Health Service. Aboriginal health	Biochemistry: ↑ mean plasma carotenoids: b- cryptoxanthin (+28.9 nmol/L, 95% Cl: 4.2-53·6), lutein–zeaxanthin (+39.9 nmol/L, 95% Cl: 6.2-72.5) and vitamin C levels (+10.1 μmol/L 95%Cl 2·0- 18·1) Diet: No changes in self-reported F&V intake using 24h dietary recall	N/A
Black et al. 2014	(Low)						workers led health promotion	Biochemistry: Mean RBC folate z-score ↑ +0.55 (95%CI 0.36-0.74) 60% in one site and 96% in another exceeded reference range	N/A

Black et al. 2013b								Health Outcomes: ↓ in antibiotics prescribed (-0.5 prescriptions/ year; 95% CI, -0.8, - 0.2) and ↓ illness-related visits to health services (-0.6; 95%CI -1.2 0.001).	N/A
	(moderate)							Biochemistry: small ↑ in mean haemoglobin (3.1 g/L; 95% CI, 1.4— 4.8 g/L) but no significant change in iron deficiency or anaemia	
Blakely et al. 2011	RCT (high)	New Zealand (urban)	24 weeks	Universal	1104 adults, 22.5% Māori,	Price discounts (12.5%) on eligible healthy foods +/- tailored education material	Partnership with Māori communities; Formative focus groups led by Māori facilitators; community-based recruitment strategies involving Māori recruiters; Māori researchers on team.	All Participants: ↑ in the amount of healthier foods purchased was greater for participants who received price discounts compared with those who did not (0.79 kg/ week, 95% CI 0.43, 1.16). No effect for education alone.	European/ other ethnicities had a 1.02kg/week (95% CI 0.60, 1.43) ↑in healthier food purchases while Māori had a ↓ of 0.15 kg/week with (95% CI - 1.10 to 0.80).

Brimblecomb e et al. 2017	RCT (high)	Australia (remote)	24 weeks	Targeted	Total population: 8515, approx. 95% Aboriginal (10 intervention stores, 10 control stores)	20% price discount on fruit and vegetables, all bottled water, and diet soft drinks, discount promoted in stores +/- education activities	Collaboration with community leaders and Aboriginal organisations. Trained local residents to maximise consumer engagement.	Food purchasing: Price discount ↑ fruit and vegetable sales by 12·7% (95% CI 4·1, 22·1), and 19·8% (95%CI 6·2, 35·1) after discount removed - an ↑ of 12 g and 18 g/capita/day. Consumer education: added 7.6% ↑ in fruit and veg sales (95% CI -3·6 to 20·2). Water ↑ by 10·0% (-2·5 to 24·2) with the price discount alone. Unintended: Sodium ↑ 8·3% (95% CI: 0·5,16·6) during and 13·8%, after discount (95%CI: 1·8,27·3) Energy ↑ 6·7%, during (95%CI 0·1,13·8) and 13·8% after discount (95%CI 3·2-25·6) Food purchasing:	N/A
Brown et al. 2019	experiment al	(remote)			population: 1400, 90% Aboriginal or	offered a fruit and vegetable voucher to the	Aboriginal health service, formative research with	No impact on fruit and vegetable sales. Total fruit	N/A

	(moderate)				Torres Strait Islander	value of \$10 each time a minimum amount (\$15- \$20) was spent on fruit and vegetables.	store staff to inform intervention design, Torres Strait Islander researcher.	sales ↓ 7% from 41 to 38g/person/ day (p = 0.01). Non-significant ↓in sales of veg and all food and drinks	
Ferguson et al. 2017	Natural experiment (moderate)	Australia (remote)	12 months	Targeted	18 Community Stores, majority Aboriginal population	Price discount strategies (each about 10%) targeting grocery products; fresh fruit and vegetables or diet soft-drinks	Strategies in response to community feedback and unanimous support for reducing the price of basic, healthy food and beverages. An Indigenous community volunteer is as an author	Food purchasing: No impact on sales of fruit and vegetables, groceries or diet soft-drinks was detected. All drink categories ↓. Mean ↓ of -19% (95%CI:28, -10) for soft drinks (p<0.001)	N/A
Lee et al. 2016	Natural experiment (Low)	Australia (remote)	5+ years	Targeted	Total population approx. 3,000. Majority Aboriginal. 7 stores	Remote store nutrition policy and subsidy scheme to provide healthy food in parity with city prices. Cross-subsidised the cost of healthy and less healthy foods	Policy developed by Aboriginal organisations in response to community concerns about the availability, accessibility and affordability of healthy food and their lack of control over stores.	Diet: Fruit and vegetable contribution to energy intake ↑ by 85%. Energy intake from sugar ↓ 25% (from 30% to 22%), but total carbohydrate remained the same (48%). Micronutrient intake ↑ generally	

Income Manag	gement	Australia	12-18 months	Targeted	Total	50% of social		Energy intake/ person / day ↑ 11% from 13,250 ±779 kJ to 14,720 ±820 kJ from 1986 -2012. Energy from saturated fat ↑ 20% (from 15% to 18%). ↑ discretionary foods and SSB.	
Brimblecomb e et al. 2010	Natural experiment (moderate)	(remote			population: 5957, majority Aboriginal	security payments to Indigenous people quarantined for essential items such as food, clothes, rent, utilities, medicine and household goods. Cannot be used for tobacco, alcohol, pornography and gambling products.	None	Intervention had no effect on total food and drink sales or fruit and vegetable sales. Rate of monthly soft drink sales per capita significantly ↓ during first 4-6 months (-215 95%CI: -367 to -64) and then ↑significantly thereafter (Post: 157 95%CI: 44 to 2712)	N/A
Doyle et al. 2017	Natural Experiment (moderate)	Australia (remote)	16 months	Targeted	1,153 Aboriginal babies born between 17 September 2007	Compulsory income management-half of social	none given	Restricting welfare payments reduced birthweight by over 100 grams	N/A

			ner forms of co		and 31 January 2009. promotion (n=0	security payments quarantined for priority needs such as food, housing, bills and clothing		(adjusted effect size -119g, SE:54.76; p<0.05) and increased the probability of low birthweight by around 30%	
Study	Study Design (quality)	Location (rurality)	Duration	Targeted / Universa	Participants**	Intervention	Indigenous involvement?	Outcomes	Differential impact?
Voluntary for	tification- folic a	acid							
Bower et al. 2004	Natural experiment (moderate)	Australia (state- wide: urban, rural, remote)	Health promotion: 2.5 years Fortification: 4 years	Universal	542 954 births, 5.3% Aboriginal or Torres Strait Islander	Voluntary folic acid fortification (bread and breakfast cereals) + health promotion to encourage women to take a periconceptional folic acid supplement	Concurrent community-based study to assess knowledge of folate, Aboriginal author	Health outcome: NTD prevalence rates for non- Indigenous infants ↓ from 1.89/1000 births, to 1.29/1000 following voluntary fortification. For Aboriginal infants, there was no evidence of a fall	Baseline NTD rates were 42% higher in Aboriginal infants (PR=1.42; [CI 1.04, 1.94]). Disparity ↑ to almost double following voluntary fortification. (PR 1.98; [CI 1.25, 3.15]). (P=0.035).
Bower et al. 2009	Natural experiment (moderate)	Australia (state- wide: urban,	Health promotion: 2.5 years	Universal	667,825 births 6% Aboriginal or Torres strait Islander	Voluntary folic acid fortification (bread and breakfast	None given	Health outcome: Overall NTD rates ↓during period of voluntary	Prevalence ratios, comparing fortification

		rural, remote)	Fortification: 10 years			cereals) + health promotion to encourage women to take a peri- {Bower, {Bower, 2016 #10854} {Bower, 2004 #10853} 2009 #10851} conceptional folic acid supplement		fortification. For Aboriginal only a slight ↓ in NTD rates.	with prefortification, were 0.70 (CI, 0.61–0.79) for non-Aboriginal infants and 0.90 (CI, 0.61–1.32) for Aboriginal infants.
D'Onise et al. 2012	Natural experiment (low)	Australia (rural)	7 years	Universal	567 adults, 99% Aboriginal mean age 39.6 years, 50% female		Support from peak Indigenous health councils	Biochemistry: Prevalence of low RBC ↑ from 15.9% at baseline to 36.9% at follow up (p<0.001). 12.8% women of child bearing age deficient at baseline and 33.6% at follow up (p=0.06).	
						Voluntary folic acid fortification (bread and breakfast cereals)			
Mandatory for	tification- folic	acid							
Arbour et al. 2007	Case control (low)	Canada (remote)	Since 1998	Universal	76 Inuit mothers of heart defect cases (n=40) and controls	Mandatory fortification of flour, rice, pasta, cornmeal, and	None given	Biochemistry: No difference between RBC folate of cases and	N/A

					(n=36); age 18- 45 years	other grain products with folic acid.		controls (p=0.37). Mean RBC folate among women of childbearing age met goal of fortification.	
Bower et al. 2016	Natural experiment (moderate)	Australia (urban + rural)	4 years	Universal	95 Aboriginal men & women aged 16-44 years, 62% female 52 919 Aboriginal births over 25 years	Mandatory fortification of wheat flour for bread making with folic acid	Approved by West Australian Aboriginal Health Ethics Committee	Biochemistry: No participant had RBC folate in the deficient range vs. 10% of women and 26% men at baseline. Mean difference in RBC after fortification 158 (95% CI 121−19); p< 0.0001). Health outcome: NTD prevalence ↓by 68% (prevalence ratio 0.32 (95% CI 0.15−0.69))	
Hilder et al. 2016	Natural Experiment (moderate)	Australia (urban+ rural + remote)	Study: 5 Year Intervention: 2 years	Universal	1,030 Australian babies with NTD from pregnancies that ended in 2007 to 2011	Mandatory fortification of wheat flour for bread making with folic acid	none given	Significant ↓ of 14.4% (95%CI 0.7, 26.2) NTD per 10,000 conceptions in the standard period relative to the NTD rates in the baseline period	NTD rates for babies with Indigenous mothers ↓ by 74.2% (95%CI 0.7, 87.7) Modest and nonsignificant ↓ NTD by 9.1% for non-

									Indigenous babies
Slagman et al. 2019	repeat cross- sectional (low)	Australia (urban + remote)	6 years	universal	13,929 adults, 30.4% Aboriginal or Torres Strait Islander, median age: 52 years, 54.2% female	Mandatory fortification of wheat flour for bread making with folic acid	None given	Biochemistry: Prevalence of folic acid deficiency ↓ from 12.2% to 1.5% (p<0.001). Overall relative risk reduction: 88%.	Significant ↓ in relative risk for both: Indigenous (20.5% pre vs. 1.6% post) and non-Indigenous people (7.4% vs. 1.5%).
Mandatory fo	rtification- iodi	ne							
Mallard & Houghton 2013	Cross sectional survey (moderate)	New Zealand (urban)	18 months	universal	677 postpartum women (14% Māori), median age 31 years	Mandatory iodine fortification of salt used in bread (+ supplement recommendatio n/ subsidisation for pregnant women)	None given	Diet: 22 % (95% CI17-26) of all women would have fallen below the EAR for nonpregnant, nonlactating women without iodine fortification of bread. Not significantly different for Māori: 15% (95%CI: 3-27).	Pre- conception: only 5% Māori women (95%CI 0-11) below EAR vs. 17% (95%CI 13- 22) for Europeans but Māori women significantly less likely to meet EAR in pregnancy (a P ≤ 0.05)
Singh et al. 2019	Natural experiment	Australia (urban,	5-8 years	universal	368 young adults (77% Aboriginal);	Mandatory iodine fortification of	None given	Biochemistry: Overall median Urinary lodine	Medan UIC for pregnant Indigenous

Reformulation	(moderate)	rural, remote)			mean age: 24.9, 48% female	salt used for bread making (+ supplement recommended)		concentrations (UIC) ↑ post- fortification from 58 μg/L (IQR, 35– 83 μg/L) to 101.0 μg/L (IQR, 66–163 μg/L, P<0.001). UIC for pregnant women (93 μg/L (IQR, 62–171 μg/L) lower than the recommended 150 μg/L	women in remote areas (n=14) was 64 µg/L (IQR, 41–89), < 50% target level. Urban Indigenous pregnant women (n=7): 122 µg/L (101–254); non-Indigenous (n=3): 165 µg/L (82–169)
McMahon et al. 2017	Quasi experiment al (moderate)	Australia (remote)	18 weeks	Targeted	26 Stores: intervention (n=15) control (n=11), mostly Aboriginal population	25% salt reduction in top selling white bread (300 mg Na/100 g), in remote community stores	Community-based formative research tastetesting. Many stores owned and controlled by a committee of community representatives.	Food purchasing: Non-significant ↓ in sodium density of all purchases (-8 mg Na/MJ; 95% CI -18, 2; p = 0.14). Effect significant when one control store was dropped (-11 mg/MJ; 95% CI -22 to -1; p = 0.04). No significant effect on total sales or market share.	N/A

Study	Study Design (quality)	Location (rurality)	Duration	Targeted / Universa	Participants**	Intervention	Indigenous involvement?	Outcomes	Differential impact?
Bains et al. 2014	Quasi- experiment al (moderate)	Canada (remote)	13-16 months	targeted	136 Inuit and Inuvialuit women of child bearing age, mean age: 35 years (intervention n=79, control n=57)	Heathy Foods North program: Increased accessibility and availability and promotion of healthier foods in stores (including traditional	Community consultations to develop intervention. Community engagement approach throughout.	Diet: Vitamin A intake ↑ by 558.23 μg/day more in intervention group. (95% CI 179.86, 936.59) a Vitamin D intake ↑ by 89.23 IU/day more 95% CI= 3.86, 174.60).	. N/A
Pakseresht et al. 2015	Quasi- experiment al (moderate)	Canada (remote)	12-14 months	targeted	263 Inuit and Inuvialuit adults, mean age: 45 years, 82% female (intervention n=172, control n=91)	foods), de- promotion of unhealthy foods. Promotional materials, taste- tests, shelf labels, educational activities in	Training for, local community health representatives, project coordinators and local store staff. Community members hired and trained to deliver the	Diet: Intervention ↓ energy intake (β=-317kcal, 95% CI -570 to -64) ↑ vitamin A intake (β=232.38ug, 95% CI 104.04, 360.72) and ↑ vitamin D intake (β=53.46 IU, 95% CI 1.88, 108.80).	
Kolahdooz et al. 2014	Quasi- experiment al (moderate)	Canada (remote)	12 months	targeted	332 Inuit and Inuvialuit adults, mean age: 44 years, 81% female (intervention n=221, control n= 111)	stores, + promotion via worksites, community-wide events, local media physical activity)	intervention and collect data. Presentation of results to stakeholders.	Diet: ↓ high fat meats (-27.9 g/day), high fat dairy (-19.8 g/day) and SSB (-189 g/day) in intervention communities (all p ≤ 0.05).	

Mead et al. 2013	Quasi- experiment al (moderate)	Canada (remote)	12 months	targeted	379 Inuit and Inuvialuit adults, mean age: 42 years, 82% female (intervention n=246, control n=133)			Diet: Intervention not associated with significant changes in food acquisition. Significant ↓ unhealthy food acquisition among overweight participants. Anthropometry: No significant impact on BMI.	
Blue Bird Jernigan et al. 2019	RCT (moderate)	United States of America (rural)	9 months in Nation A and 12 months in Nation B.	targeted	1637 Native American adults, mean age: 42 years, 62% female (intervention n=825, control n=812)	Increased accessibility and availability of healthier foods in tribally-owned convenience stores, in-store promotion of healthy foods and reduced- price combination meal deals.	Led by local Native American researcher, Steering committee overseeing study. Community focus groups guided intervention development; tribal health staff collected data with researchers	Diet: No difference in fruit and vegetable intake. Shopping frequency was significantly associated with purchases of fruit, veg and healthy items.	N/A

Gittlesohn et al. 2013	RCT (moderate)	United States of America (rural)	6 intervention phases, each phase 6- 10weeks	targeted	276 Native American adults, mean age: 46 years, 75% female, (intervention n=98, control n=47)	Increased availability of healthier foods in stores, promotion of healthy foods in stores (healthy cooking methods, tastetests, promotional items, educational displays, shelf labels) Radio announcements of key messages.	Intervention developed following extensive formative research and community engagement workshops. Delivered by health workers fluent in both English and Navajo	Anthropometry: BMI trend toward impact (Intervention: -0.6 +/- 3.3, Control: +0.6 +/-3.1, P = 0.06). Intervention exposure associated with ↓in BMI (Very low: -0.1 +/- 2.3; Very high: -1.8 +/- 3.8, P<0.01). BMI continuous exposure score = -0.6 +/- 0.2, p<0.1 Diet: intervention exposure assoc. with ↑ healthy food purchasing (p<0.01).	N/A
Ho et al. 2008	Quasi- experiment al (moderate)	Canada (remote)	9 months	targeted	95 First Nations adults, mean age: 42 years, 77% female, (intervention n=57, control n= 38)	Increased availability and promotion of healthy food in stores (+ school curriculum + Schools encouraged to adopt healthy food policy + community awareness +physical activity)	Formative research and collaboration with key stakeholders and community members. Community members collected data.	Diet: ↑ healthy food acquisition in intervention communities (score 45.86 SD: 25.5) vs. controls (score: 33.92 SD: 19.3) (p = .003). Anthropometry: No significant change in BMI	N/A?

Rowley et al. 2000	Quasi experiment al (moderate)	Australia - (remote)	4 years	targeted	Cross-sectional samples (n=200, 185 and 132) of Aboriginal	Looma Healthy Lifestyle: Community Council employed community member as store manager. Store policy to improve quality and quantity of fresh produce,	Aboriginal community members initiated and ultimately directed the program	Biochemistry: Significantly ↓ fasting insulin (from 21 (95%Cl 18-23) to 16 (95%Cl 15-19) µU/mL) in people aged 35+ Anthropometry: No change in overweight or obesity. Health outcome: no change in prevalence of diabetes	N/A
Rowley et al. 2001	Quasi- experiment al (moderate)	(.c.mote)			people aged 15 years and over, 51% female	store tours. (+ community health promotion, nutrition education, cooking classes, hunting trips +physical activity + smoking cessation)	Aboriginal Health Workers employed to run program	Biochemistry: Significantly ↓ prevalence of high cholesterol (from 31%, to 15%; and ↑ plasma antioxidant concentrations (by approx. 20%). Diet: Apparent intake of fruit and vegetable ↑ 6.8 g/MJ	

Brimblecomb e et al. 2019	RCT (high)	Australia (remote)	12-weeks implementatio n + 24-weeks post intervention	targeted	20 stores	Healthy retail environment to reduce merchandising of 4 food categories (sugar, SSB, sweet biscuits, and confectionery)	Collaboration with remote community store directors, co- designed with ALPA. Knowledge exchange with community leaders	[under embargo until article published]	N/A
H Harness fo	ood supply cl	hain and a	ction across se	ctors to e	nsure coherence Participants	e with health Intervention	Indigenous	Outcomes	Differential
Study	Design (quality)	(rurality)	Duration	/ Universa	raiticipants	intervention	involvement?	Outcomes	impact?
Bersamin et al. 2019	Quasi- experiment al (moderate)	United States of America (rural, remote)	9 months	targeted	76 Alaska Native school children (intervention=3 8, control n=38), mean age 14 years, 55% female.	Fish-to-school program: local salmon caught by Native owned businesses served in the school lunches. (+ Classroom education, community events celebrating traditional foods).	Community working group co- designed activities with researchers that combined Yup'ik worldview with evidence- based strategies.	Biochemistry: rate of ↑ in nitrogen stable isotope (fish biomarker), 0.16 times greater in intervention group (Beta = 0.16; p < .05). Diet: ↑ odds of any fish servings (OR: 1.85 (95%CI: 1.00, 3.45), ↑ total fish servings (rate ratio: 2.22 95%CI 1.12, 4.35). ↑ in diet quality 4.57 times greater in intervention group (Beta = 4.57; p < .05).	N/A

Brimblecomb e et al. 2017	Quasi- experiment al (moderate)	Australia (remote)	4 years	targeted	Stakeholders in 4 Aboriginal communities, populations of 250-2000 people	Multi-sectoral stakeholders (Good Food Groups) used continuous improvement approach to prioritise actions to achieve agree goals in the local food system	Aboriginal project coordinator in each community; over half of people regularly participating in the Good Food Groups were Aboriginal, community feedback on data collection tools.	Food Purchasing: Marked downward trend in monthly confectionery sales and a slight upward trend for water sales in all communities. No clear impact on fruit and vegetable or soft drink sales (improvement in one community only).	N/A
Butler et al. 2011	Natural experiment (moderate)	Australia (remote)	12 months	targeted	Remote Aboriginal community store serving a population of approx. 400 people.	Store Policy to remove the three highest selling SSB from the store.	Policy designed by Aboriginal leaders within Aboriginal owned and controlled organisation. Store monitoring and control by the Aboriginal Steering Committee	Food purchasing: Total SSB sales ↓by 50% (23,153L) in one year. ↓ sugar sold from 6.47 to 4.36 tonnes. SSB sales (as % all beverage sales) ↓ from 48– 51% to 23–30%; diet drinks ↑ from 15% to 20–22%; fruit juice, iced tea and flavoured still water ↑ from 12– 14% to 21–29%; water ↑ from 16– 18% to 20–23%	

Cueva et al. 2018	Quasi- experiment al (low)	United States (rural)	3 months	targeted	101 Native American adults, 53% aged 25-54 years, 78% female.	Mobile grocery store transported healthy, foods to the community. centre twice a week; health promotion activities in conjunction visits, e.g. cooking classes, samples, recipes, farmers workshops farmers markets)	Guided by the Community Advisory Boards- provided oversight and direction for the project, and community members developed and facilitated activities. Community member + researcher conducted survey	Food Security: ↑ fruit availability in homes from 66% to 80%.(p = .026). Non-significant ↓ Food insecurity from 57% to 43% (p = .147). Unintended: ↑ snack food availability from 22% to 48% (p < .001)	
Fehring et al. 2019	Quasi- experiment al (moderate)	Australia (remote)	12 months	targeted	Community populations ranging from 300 to 1,400 people 85-95% Aboriginal or Torres Strait Islander	Multisectoral committees led environmental actions to ↑ water and ↓ SSB. E.g. water bubblers, drink fridges in stores promoting water; policies governing drink availability. (Plus social marketing)	Aboriginal health organisation staff worked with Aboriginal Shire Councils, community leaders, organisations and community members to codesign and implement local actions, Indigenous author.	Food purchasing: ↑ Water sales as % total drink volume by 3.1% (p<0.001) and ↓ SSB sales as % total drink volume by 3.4% (p<0.001) compared to the control store.	

Tyrell et al. 2003	Natural experiment (low)	Australia (remote)	2 year	targeted	Aboriginal community population: 300 people	Intersectoral and intrasectoral collaboration to improve community nutrition e.g. vegetable garden school activities, store activities women's centre, community-based workers, ↑ healthy food choices in the store, ↑ health professional visits	Community members initiated the project, directed by steering committee comprising senior community members. Community based workers on the project team.	Food Purchasing: 65% ↓ in sugar 175% ↑ low-fat tinned meat and vegetable meals, 81% ↑ fruit and 11% ↑ vegetable purchasing from the store.	
Study	Study Design (quality)	Location (rurality)	Duration	Targeted / Universa	Participants	Intervention	Indigenous involvement?	Outcomes	Differential impact?
Browne et al. 2019	Cross- sectional (low)	Australia (urban, rural)	12 months	universal & Targeted	150 Aboriginal or Torres Strait Islander adults, mostly 18-49 years, 76% female	Universal and Aboriginal-specific campaign to ↓sugary drink consumption aired on television.	Led by Aboriginal health organisation. Team included experienced Aboriginal health promotion practitioner. Campaign developed in consultation with Aboriginal people.	Diet: 60% who had seen the targeted campaign reported ↓ SSB vs. 48% of those who had not seen the it but had seen the universal campaign. Difference was not statistically significant.	No difference in reported

									who had not (56% vs 52%, P > 0.05).
Coppell et al. 2009	Quasi- experiment al (moderate)	New Zealand (rural)	2 years	targeted	286 Māori adults, mean ages 39 and 63 years, 59% female. Most changes were among 25–49 years old women (n=102):	Community-led healthy lifestyle intervention: local media and role models, community education, cooking skills, label reading, recipes, weighins) and a structural strategy. (Local organisations encouraged to make structural/ policy change + physical activity + smoking cessation).	Community development approach. Involvement of community members in every step, from planning, development and implementation of the intervention.	Health outcome: ↓ prevalence of insulin resistance (38.2–25.6%) and diabetes (6.9%-1.3%) but ↑ prediabetes i (2.9%-12.8%) (p = 0.015). Diet: ↑ % of women 25–49 years eating wholemeal/ wholegrain bread from 42.2% to 65.4% (p = 0.044), Anthropometry: non-significant ↓ WC, weight and BMI (from 33.6, SD: 8.6, to 32.1, SD: 7.3) among women 25-49 years.	N/A

Karanja et al. 2010	Quasi- experiment al (moderate)	United States of America (rural)	2 years	targeted	410 Native American/ Alaska Native mothers or guardians of infants 0-24 months, mean age: 25 years pre-test sample: n= 205, post- test sample n= 205).	Community- wide health promotion to raise awareness about breastfeeding and reducing SSB (local media posters, health education for mothers, breastfeeding rooms, water availability etc.)	Interventions informed by focus groups. Community Health Workers and cultural leaders delivered	Breastfeeding: initiation 14% higher and 6- month rates 15% higher than national data. 12 month rates comparable to national data (both 17%). Anthropometry: BMI-Z scores ↑ but ↑ was less in groups receiving individual counselling (zBMI ↓ by 0.75, P = 0.016) but still > comparison sample.	
Maupome et al. 2010	Quasi- experiment al (moderate)	United States of America (rural)	2 years	targeted	178 Native American/ Alaska Native infants aged 18- 30 months, 46% female.	counselling with Community Health Workers- to support breastfeeding along with water and sugar- sweetened beverage interventions	interventions	Health outcome: Significant ↓ trends in dental caries. Dt1 caries ↓ between 0.300 (SD: 0.140, p= 0.032) and 0.631 (SD:0.157, p= 0.000)	

Study	Study Design (quality)	Location (rurality)	Duration	Targeted / Universa	Participants**	Intervention	Indigenous involvement?	Outcomes	Differential impact?
Martens 2002	Quasi- experiment al (moderate)	Canada (rural)	Prenatal - 3 months	Targeted	283 First Nations women	Prenatal breastfeeding education delivered by nurse. Postpartum peer counsellor program once every 2 weeks for months 2 and 3. (+ other prenatal care issues)	Indigenous peer counsellors hired at the health centre and trained in communication skills and basic breastfeeding knowledge.	Breastfeeding: ↑ breast feeding initiation (1.5 times higher than previous 5 years). Clients half as likely as non- clients, to wean (adjusted OR = 0.50, 95% CI 0.25- 0.98, P < .02). ↑ breastfeeding at 2 months (61% vs. 48%) and 6 months (56% vs. 19%)	N/A
Gray-Donald et al. 2000	Quasi- experiment al (moderate)	Canada (remote)	9 months	Targeted	219 First Nations women, mean age 24 years (intervention n- 112, control, n=107)	Individual diet counselling, (mean 4/person) related to healthy eating and staying within guidelines for weight gain during pregnancy; (+ Local media, + physical activity)	Research proposal developed at the request of, and in close collaboration with First National Health organisation. Indigenous health workers hired in each community.	Anthropometry: No difference in weight gain between groups. Diet: No change in energy/nutrient intake Breastfeeding at 6 weeks: 87% in the intervention group vs. 83% control group.	N/A

Muhajarine et al. 2012	Cross- sectional survey (moderate)	Canada (National)	9 months? (pre/postnatal data)	Universal	48,184 women, 23% First Nations	Canada Prenatal Nutrition Program, individual nutrition education, group nutrition counselling or lifestyle education, food/ milk supplements (Also, community- based projects across Canada, parenting support, housing assistance)	Program included partnerships with First Nations organisations.	Breastfeeding: High program exposure ↑ breastfeeding initiation (OR 1.27, 95%CI: 1.11-1.46) and duration (OR 2.97, 95%CI: 1.01- 8.76). Health outcome: 28% ↓ risk preterm birth (OR 0.72 CI: 0.57-0.92); a 35% ↓ low birth weight (0.65 95%CI: 0.53-0.81) and 13% ↓ poor neonatal health (OR: 0.87 95%CI 0.77-0.98) Unintended: High program exposure ↑ excess weight gain for both Aboriginal (OR: 1.09 95%CI: 1.01- 1.17) and non- Aboriginal women (OR: 1.16, 95%CI: 1.01-1.33)	For non-Aboriginal women, high exposure not associated with initiation but was with duration (OR 4.79, 95%CI: 2.90-7.89). ORS similar for non-Aboriginal women but only non-Aboriginal women had ↓ risk (9%) of having an SGA infant. Unintended: ↑ risk of having an LGA infant for Aboriginal women only (OR 1.27 95%CI 1.08-1.50)
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Quinn et al. 2017	Quasi- experiment al (low)	Australia (state- wide: urban, rural, remote)	3 or 6 months	Universal + targeted	34,211, 4.5% Aboriginal. Universal program: mean age 49 years, Targeted program: 70% aged 18–49 years and more likely to be from low income or remote area)	Telephone information and coaching about lifestyle change. Universal and culturally tailored program (+physical activity advice)	Formative research to tailor program. Peak Aboriginal health organisation funded to facilitate promotion of targeted program Aboriginal community health professionals were source of referral.	Anthropometry: On average Aboriginal participants ↓ 2.1kg [SD: 6.3] after 3 months and ↓ 3.33kg [SD 9.4] after 6 months; ↓ WC of 3.4 cm [SD 5.8] after 3 months ↓ 6.2cm after 6 months; ↓ BMI of 0.8 [SD 2.4] at 3 months and 1.2 [SD 3.7] after 6months Diet: ↑ fruit intake by 0.5 (SD 1.0) serves ↑ veg by 0.8 (SD 1.4) serves/day) at 3 and 6 months, ↓ take away by 0.3 serves/week [SD 1.2] after both 3 and 6 months. (All p<0.0001). SSB ↓ 0.3 [SD1.4] serves/day after 3 months (p=0.002).	No differences between the improvement s [between baseline and 6-months] for Aboriginal and non-Aboriginal participants. No significant differences in Aboriginal participants' improvement based on program completed i.e. targeted (mean ↓ weight -2.7kg (SD 8.6), -BMI 1.1 (SD 3.1), waist ↓ -5.0 (SD 8.1) vs. universal program (mean ↓ weight -4.7kg (SD 6.1), BMI -1.7 (SD 2.3), waist -6.9 (SD 7.6)
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G Give nutrition education and skills										
Study	Study Design (quality)	Location (rurality)	Duration	Targeted / Universa	Participants**	Intervention	Indigenous involvement?	Outcomes	Differential impact?	
Frenn et al. 2010	Quasi- experiment al (low)	United States of America (urban)	12 months	Universal	130 middle school students, 3% Native American, aged 12-15 years, 52% female. (intervention n=67, control n=64)	School curriculum: four- session (Internet and video) intervention with healthy snack provided (+ physical activity at one school)	None given	Diet: No difference in % fat between the intervention and control groups overall	Girls in the intervention group ↓ dietary fat by 0.5% v's. 2% ↑ for controls (p = .018) for African Americans, White, Hispanics, and Native Americans	
Govula et al. 2007	Quasi- experiment al (low)	United States of America (rural)	6 weeks	Targeted	33 Native American school children aged 8- 11 years, 46% female, (intervention n=12, control n=21)	Culturally- adapted nutrition education, delivered in the classroom. 6 x 30 minute lessons	Lessons developed by investigators with input from tribal members.	Diet: ↑ fruit and vegetable intake (change between groups: 2.7 ± 1.0 serving per day, P ≤ .0001) ↑ vegetables (2.2 ± 0.3 serving per day, P ≤ .0001) non-significant ↑ fruit intake	N/A	

Jiminez et al. 2003	Quasi- experiment al (low)	Canada (rural)	4 years	Targeted	156 (baseline) 146 (follow up) First Nations school children	Curriculum for children in grades 1 -6, included nutrition, fitness, diabetes and healthy lifestyles in 10 x 45 min lessons/year/grade. (Also, local media, physical activity)	Program initiated following community requests Community Advisory Board	Diet: ↓ frequency high-fat foods from 90.4% to 82.2% (P<0.05) Unintended ↓ fruit (4.4+/-4.1 kcal/day to 2.9 +/-1.8 kcal/day) (P<0.001), ↑ in energy from sugar (from 96.2 +/-99.8 kcal/d to 146 +/-174.9kcal/d, P<0.05)	N/A
Malseed et al. 2014	Quasi- experiment al (low)	Australia (urban)	1 x 90min session on nutrition	Targeted	81 high school students, 89% Aboriginal or Torres Strait Islander, mean age: 14.8 years, 67.7% female.	School-based education program using positive role models. 90 min session delivered once/week over 7-weeks Covered 7: modules including nutrition (also chronic disease, physical activity, smoking, drugs & alcohol)	Program developed in partnership Indigenous healthy life- style officers. Young Indigenous role models facilitated all sessions.	Diet: Significant difference of 1.5 days/week (95% CI 0.05-2.98) in breakfast frequency between the control and intervention group (P = 0.042). Differences between groups in fruit and veg, takeaway and soft-drink not significant.	None

Pettigrew et al. 2015	quasi- experiment al (low)	Australia (urban, rural)	2-8 sessions	universal	875 adults, 19% Aboriginal, 41.1% Aboriginal participants <29 years, 76% female	Education program 2-8 sessions covering a range of nutrition topics, label reading, budgeting etc.	None given	Diet: For Aboriginal participants, mean fruit intake ↑ by 0.60 (SD 1.08) serves/d and veg intake ↑ by 1.14 (SD 1.81) serves/d (both p<0.001) Junk food consumption ↓ by -0.54 (SD 1.57) days/week (p<0.001)	For non-Aboriginal participants, no change in fruit intake. Mean veg intake ↑ by 0.36 (SD 1.54) serves/day. Junk food ↓ by - 0.11 (SD0.95) days/week from 0.83 to 0.73 d/w (p<0.005)
Ronsley et al. 2013	Quasi- experiment al (medium)	Canada (remote)	10 months	Targeted	179 First Nations school students, mean age: 10.9 years, 48% female (intervention n=118, control n= 61)	21 lesson curriculum (tailored from universal program). Older students teach the younger students the lesson. Includes lessons about healthy and unhealthy foods and drinks (+ physical activity, self-esteem)	Before implementation, each community had the opportunity to review the original program. Focus groups to help tailor the program	Anthropometry: ↓ zBMI (1.10 to 1.04, p = .028) ↓ WC (77.1 to 75.0 cm, p < .0001) in Intervention group vs. ↑ in zBMI (1.14 to 1.23, p = .046) in the control group. % with "normal" zBMI ↑ by 11% in one school, and obesity ↓ by 11% in the other. In the control group, the % of "normal" zBMI ↓ by 11%	N/A

Santos et al. 2014	RCT (high)	Canada (urban, rural)	1 school year (10 months)	Universal	647 school students, 15% First Nations, mean age 9.3 years, 51% female, (intervention= 340, control n= 307)	Older students received 45- minute healthy living lesson then taught 30- minute lesson to their younger "buddies."	Included First Nations peer mentors	Anthropometry: ↓ WC in intervention group (-2.00 [95% CI, -2.48 to -1.51] vs. control group -0.40 [-0.89 to 0.09] cm; p < .001). No difference in changes in zBMI between groups.	↓ WC nearly double in First Nations vs. with non— First Nations children (-2.5 cm [95% CI, -4.2 to -0.8] vs1.3 cm [-2.0 to -0.6])
Tomlin et al. 2012	Quasi- experiment al (low)	Canada (rural, remote)		Targeted	134 First Nations school students, mean age 13 years, 48% female	Classroom- based nutrition education at least once/ month, fruit and vegetable taste tests and a sugar- sweetened beverage campaign in classroom or school. (+ physical activity)	Initiated in response to an invitation from 3 First Nations communities based on concerns about diabetes in their communities	Anthropometry No change in zBMI pre: 1.12; post: 1.10; p=0.288); zWC ↑ from 0.46 (SE1.07) to 0.57 (SD1.04) (p=0.023). Diet: ↑ in the variety of vegetables consumed (1.10 +/- 1.18 to 1.45 +/- 1.24; p<0.05); Energy, fruit, veg, sugary drink intake did not change	N/A

^{*} Articles published from the same study have some cells merged to reduce repetition

^{**} We have used country-specific terms for Indigenous peoples e.g. Aboriginal (Australia), Māori (New Zealand), First Nations, Inuit, Inuvialuit (Canada), Native American, Alaska Native (United States of America)