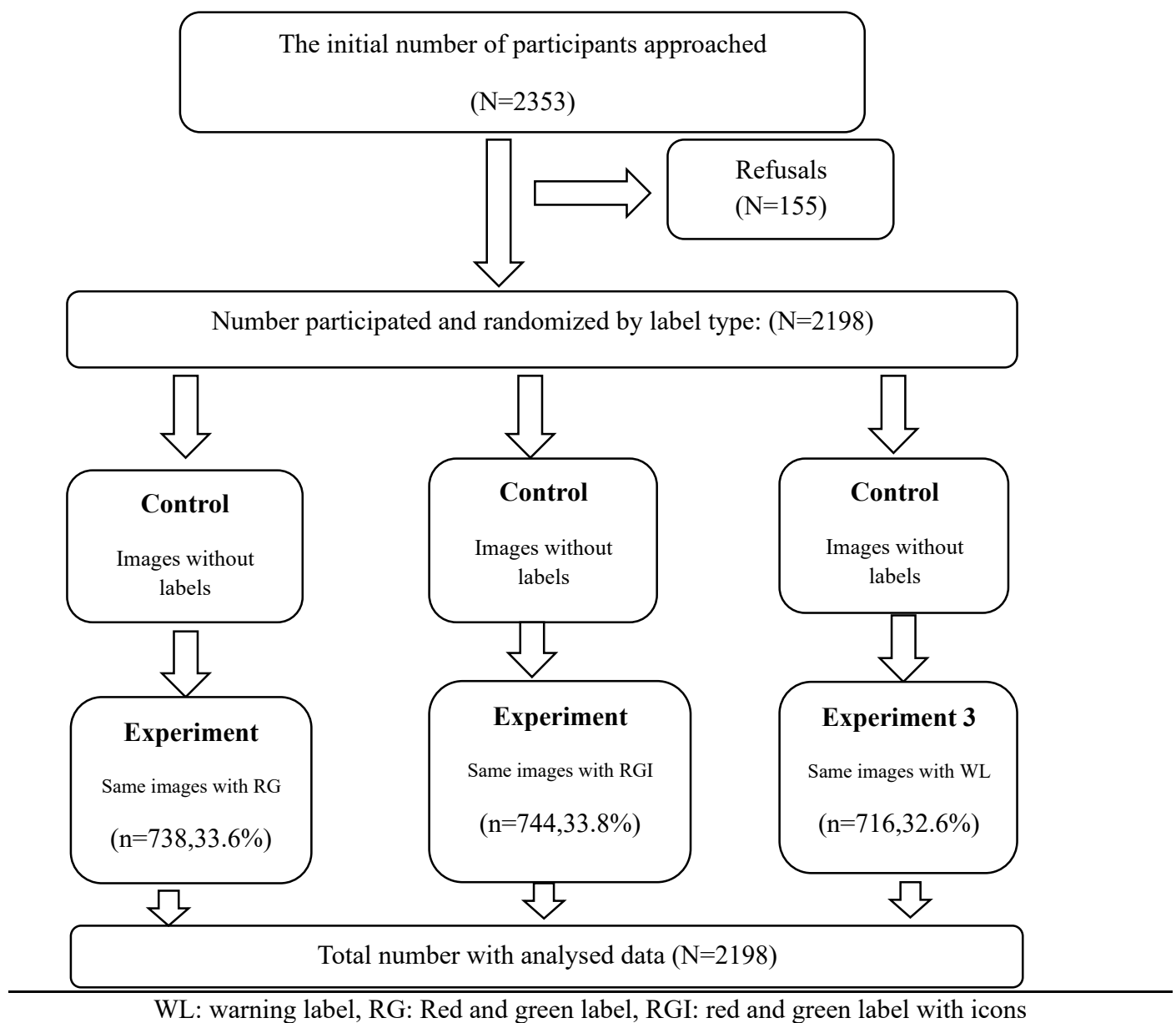


Participant flow



Baseline characteristics

	RG (N=738)	RGI (N=744)	WL (N=716)	Total (N=2198)	P-value
County					0.998
Nairobi	418 (56.6%)	430 (57.8%)	411 (57.4%)	1259 (57.3%)	
Mombasa	126 (17.1%)	126 (16.9%)	122 (17.0%)	374 (17.0%)	
Kisumu	132 (17.9%)	131 (17.6%)	128 (17.9%)	391 (17.8%)	
Garissa	62 (8.4%)	57 (7.7%)	55 (7.7%)	174 (7.9%)	
Sex					0.008
Male	363 (49.2%)	334 (44.9%)	380 (53.1%)	1077 (49.0%)	
Female	375 (50.8%)	409 (55.0%)	336 (46.9%)	1120 (51.0%)	
Intersex	0 (0.0%)	1 (0.1%)	0 (0.0%)	1(0.0%)	
Age category					0.751
18 to 29	268 (36.3%)	257 (34.5%)	247 (34.5%)	772 (35.1%)	
30 to 50	401 (54.3%)	427 (57.4%)	403 (56.3%)	1231 (56.0%)	
51 and above	69 (9.3%)	60 (8.1%)	66 (9.2%)	195 (8.9%)	
Education level					0.492
No education	0 (0.0%)	1 (0.1%)	2 (0.3%)	3 (0.1%)	
Primary school	151 (20.9%)	164 (22.6%)	136 (19.5%)	451 (21.0%)	
Secondary school	304 (42.2%)	298 (41.1%)	283 (40.5%)	885 (41.3%)	
Post-secondary	266 (36.9%)	262 (36.1%)	278 (39.8%)	806 (37.6%)	
Marital Status					0.131
Currently married	445 (60.3%)	431 (57.9%)	449 (62.7%)	1325 (60.3%)	
Previously married	72 (9.8%)	97 (13.0%)	81 (11.3%)	250 (11.4%)	
Never married	221 (29.9%)	216 (29.0%)	186 (26.0%)	623 (28.3%)	
Employment status					0.126
Formal employment	154 (20.9%)	183 (24.6%)	158 (22.1%)	495 (22.5%)	
Self-employed	304 (41.2%)	252 (33.9%)	261 (36.5%)	817 (37.2%)	
Casual workers	157 (21.3%)	167 (22.4%)	175 (24.4%)	499 (22.7%)	
Unemployed	105 (14.2%)	127 (17.1%)	105 (14.7%)	337 (15.3%)	
Farmers	13 (1.8%)	12 (1.6%)	16 (2.2%)	41 (1.9%)	
Others	5 (0.7%)	3 (0.4%)	1 (0.1%)	9 (0.4%)	
Ethnic background					0.976
Somali	62 (8.4%)	56 (7.5%)	56 (7.8%)	174 (7.9%)	
Luhya	79 (10.7%)	75 (10.1%)	83 (11.6%)	237 (10.8%)	
Luo	226 (30.6%)	220 (29.6%)	199 (27.8%)	645 (29.3%)	
Kikuyu	128 (17.3%)	127 (17.1%)	126 (17.6%)	381 (17.3%)	
Kamba	94 (12.7%)	101 (13.6%)	95 (13.3%)	290 (13.2%)	
Others	149 (20.2%)	165 (22.2%)	157 (21.9%)	471 (21.4%)	
Parent with children < 18 years					0.443
No	202 (27.4%)	194 (26.1%)	175 (24.4%)	571 (26.0%)	
Yes	536 (72.6%)	550 (73.9%)	541 (75.6%)	1627 (74.0%)	
Main decision-maker					0.012
No	199 (27.0%)	153 (20.6%)	161 (22.5%)	513 (23.3%)	
Yes	539 (73.0%)	591 (79.4%)	555 (77.5%)	1685 (76.7%)	

WL: warning label, RG: Red and green label, RGI: red and green label with icons, Chi-Square tests of association were used to determine significant variations

Outcome measures

1. Proportions of correct identification of nutrients of concern and healthiness of products

Product/Nutrient of concern	Identification	No Label (N=2198)	Red and green symbols (N=738)	Red and green with Icons (N=744)	Warning Label (N=716)	P-value
Potato crisps						
Salt	Correct	746 (33.9%)	533 (72.2%)	558 (75.0%)	616 (86.0%)	< 0.001
	Not Correct	1452 (66.1%)	205 (27.8%)	186 (25.0%)	100 (14.0%)	
Fats	Correct	588 (26.8%)	526 (71.3%)	535 (71.9%)	599 (83.7%)	< 0.001
	Not Correct	1610 (73.2%)	212 (28.7%)	209 (28.1%)	117 (16.3%)	
Healthiness of product	Correct	752 (34.2%)	509 (69.0%)	507 (68.1%)	531 (74.2%)	0.025
	Not Correct	1446 (65.8%)	229 (31.0%)	237 (31.9%)	185 (25.8%)	
Packaged juice						
Sugar	Correct	837 (38.1%)	579 (78.5%)	569 (76.5%)	631 (88.1%)	< 0.001
	Not Correct	1361 (61.9%)	159 (21.5%)	175 (23.5%)	85 (11.9%)	
Unhealthiness	Correct	516 (23.5%)	433 (58.7%)	421 (56.6%)	466 (65.1%)	0.003
	Not Correct	1682 (76.5%)	433 (58.7%)	421 (56.6%)	466 (65.1%)	
Zanita soda						
Sugar	Correct	1130 (51.4%)	609 (82.5%)	616 (82.8%)	652 (91.1%)	< 0.001
	Not Correct	1068 (48.6%)	129 (17.5%)	128 (17.2%)	64 (8.9%)	
Unhealthiness	Correct	1027 (46.7%)	529 (71.7%)	530 (71.2%)	525 (73.3%)	0.647
	Not Correct	1171 (53.3%)	529 (71.7%)	530 (71.2%)	525 (73.3%)	
Paired bread products						
Sugar	Correct	803 (36.5%)	553 (74.9%)	531 (71.4%)	114 (15.9%)	< 0.001
	Not Correct	1395 (63.5%)	185 (25.1%)	213 (28.6%)	602 (84.1%)	
Salts	Correct	567 (25.8%)	300 (40.7%)	318 (42.7%)	356 (49.7%)	0.001

	Not Correct	1631 (74.2%)	438 (59.3%)	426 (57.3%)	360 (50.3%)	
Fats	Correct	598 (27.2%)	494 (66.9%)	489 (65.7%)	77 (10.8%)	< 0.001
	Not Correct	1600 (72.8%)	244 (33.1%)	255 (34.3%)	639 (89.2%)	
Unhealthiness	Correct	774 (35.2%)	630 (85.4%)	598 (80.4%)	217 (30.3%)	< 0.001
	Not Correct	1424 (64.8%)	108 (14.6%)	146 (19.6%)	499 (69.7%)	

Paired Yoghurt Products

Sugar	Correct	841 (38.3%)	236 (32.0%)	491 (66.0%)	570 (79.6%)	< 0.001
	Not Correct	1357 (61.7%)	502 (68.0%)	253 (34.0%)	146 (20.4%)	
Salts	Correct	507 (23.1%)	336 (45.5%)	328 (44.1%)	254 (35.5%)	< 0.001
	Not Correct	1691 (76.9%)	402 (54.5%)	416 (55.9%)	462 (64.5%)	
Fats	Correct	599 (27.3%)	363 (49.2%)	379 (50.9%)	396 (55.3%)	0.056
	Not Correct	1599 (72.7%)	375 (50.8%)	365 (49.1%)	320 (44.7%)	
Unhealthiness	Correct	603 (27.4%)	183 (24.8%)	416 (55.9%)	426 (59.5%)	< 0.001
	Not Correct	1595 (72.6%)	555 (75.2%)	328 (44.1%)	290 (40.5%)	

Breakfast cereals

Sugar	Correct	426 (19.4%)	537 (72.8%)	170 (22.8%)	582 (81.3%)	< 0.001
	Not Correct	1772 (80.6%)	201 (27.2%)	574 (77.2%)	134 (18.7%)	
Salts	Correct	558 (25.4%)	233 (31.6%)	129 (17.3%)	193 (27.0%)	< 0.001
	Not Correct	1640 (74.6%)	505 (68.4%)	615 (82.7%)	523 (73.0%)	
Fats	Correct	529 (24.1%)	531 (72.0%)	139 (18.7%)	556 (77.7%)	< 0.001
	Not Correct	1669 (75.9%)	207 (28.0%)	605 (81.3%)	160 (22.3%)	
Unhealthiness	Correct	506 (23.0%)	550 (74.5%)	148 (19.9%)	557 (77.8%)	< 0.001
	Not Correct	1692 (77.0%)	188 (25.5%)	596 (80.1%)	159 (22.2%)	

Chi-Square tests of association were used to determine significant variations

2. Comparison of Relative Risk Ratios for Correct Identification of nutrients of concern in various foods using different front-of-pack labels (FOPLs).

Nutrients of Concern	WL Vs RG	WL VS RGI	RGI VS RG
	RRR(CI)	RRR(CI)	RRR(CI)
Potato crisp high in salt	0.98 (0.95-1.04)	1.10 (1.06-1.14)***	0.89 (0.85-0.94)***
Potato crisp high in fats	0.99 (0.95- 1.03)	1.10 (1.06-1.14)***	0.90 (0.84-0.97)**
Unhealthiness in potato crisps	0.99 (0.93- 1.06)	0.90 (0.90- 0.93)***	1.08 (1.00- 1.17)***
Packaged juice is high in sugar	1.01 (0.99-1.04)	1.10 (1.07-1.14)***	0.92 (0.88-0.96)***
Unhealthiness of packaged juice	0.97 (0.95- 0.99)**	0. 87 (0.83-0.91)***	1.12 (1.05-1.18)***
Soda is high in sugar	1.00 (0.93-1.06)	1.08 (1.05-1.10)***	0.93 (0.88-0.97)***
Unhealthiness of Soda	1.00 (0.95-1.04)	1.00 (0.95-1.03)	1.03 (1.00- 1.06)*
Bread high in sugar	1.03 (0.98-1.07)	0.70 (0.62-0.79)***	1.47 (1.29-1.67)***
Bread high in salt	0.99 (0.95 -1.02)	1.05 (0.97-1.14)	0.95 (0.89-1.00)*
Bread high in fat	1.01 (0.99-1.03)	0.71 (0.63-0.80)***	1.42 (1.25- 1.62)***
Unhealthiness of Bread	1.36 (1.05- 1.76)**	0.29 (0.15-0.55)***	4.80 (2.13-10.80)***
Yoghurt high in sugar	0.80 (0.67-0.94)**	1.11 (1.09-1.14)***	0.72 (0.60-0.86)***
Yoghurt high in salt	1.00 (0.97-1.04)	0.95 (0.85-1.05)	1.06 (0.93- 1.21)
Yoghurt high in fats	0.99 (0.92-1.05)	1.04 (1.01-1.06)***	0.95 (0.89-1.02)
Unhealthiness in yoghurts	2.26 (1.23- 4.15)**	0.94 (0.89-0.99)	2.40 (1.28-4.51)**
Breakfast cereal high in sugar	1.39 (1.20- 1.61)***	1.50 (1.28-1.74)***	0.93 (0.92-0.95)***
Breakfast cereal high in salt	1.01 (0.97-1.04)	0.94 (0.85-1.05)	1.07 (0.94-1.21)
Breakfast cereal high in fats	0.99 (0.93-1.04)	1.03 (1.00-1.06)*	0.96 (0.89-1.02)*
Unhealthiness in breakfast cereals	0.26 (0.14-0.49)***	0.25 (0.13-0.49)***	1.04 (0.99- 1.09)

WL: warning label, RG: Red and green label, RGI: red and green label with icons, RRR: Relative risk ratio, CI: Confidence Interval, *P<0.05, **P<0.01, ***P<0.001, Poisson regression was used to assess the effectiveness of different FOPL symbols, and the models are adjusted for sex and the role of being a decision-maker for food purchases in the household.

2. Reduced intention to purchase unhealthy foods by FOPL.

Product	Intention to Purchase	No Label (N=2198)	Red and green symbols (N=738)	Red and green with Icons (N=744)	Warning Label (N=716)	P- value
Potato crisps						< 0.001
	No Intention to purchase	303 (13.8%)	378 (51.2%)	371 (49.9%)	447 (62.4%)	
	Intention to purchase	1895 (86.2%)	360 (48.8%)	373 (50.1%)	269 (37.6%)	
Packaged juice						< 0.001
	No Intention to purchase	303 (13.8%)	318 (43.1%)	312 (41.9%)	370 (51.7%)	
	Intention to purchase	1895 (86.2%)	420 (56.9%)	432 (58.1%)	346 (48.3%)	
Soda product						< 0.001
	No Intention to purchase	752 (34.2%)	399 (54.1%)	409 (55.0%)	455 (63.5%)	
	Intention to purchase	1446 (65.8%)	339 (45.9%)	335 (45.0%)	261 (36.5%)	
Bread products						< 0.001
	No Intention to purchase	92 (4.2%)	218 (29.5%)	225 (30.2%)	275 (38.4%)	
	Intention to purchase	2106 (95.8%)	520 (70.5%)	519 (69.8%)	441 (61.6%)	
Yoghurt products						0.013
	No Intention to purchase	459 (20.9%)	202 (27.4%)	197 (26.5%)	236 (33.0%)	
	Intention to purchase	1739 (79.1%)	536 (72.6%)	547 (73.5%)	480 (67.0%)	
Breakfast cereals						0.065
	No Intention to purchase	109 (5.0%)	232 (31.4%)	199 (26.7%)	227 (31.7%)	
	Intention to purchase	2089 (95.0%)	506 (68.6%)	545 (73.3%)	489 (68.3%)	

Adverse events

There were no adverse events associated with this trial.