

Participant recruitment, baseline characteristics and at-home-measurements of cardiometabolic risk markers: insights from the Supreme Nudge parallel cluster-randomised controlled supermarket trial

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Supplementary material

Supplementary Table 1. Recruitment strategy utilisation, per month in 2021.

	January	February	Spring 2021 March	April	May	September	Autumn 2021 October	November
Supermarkets #1 - #4	<ul style="list-style-type: none"> - Local (online) media - Flyers/letters to households - Flyers and posters 	<ul style="list-style-type: none"> - Post supermarket's Facebook timeline - Supermarket's customer panel mailing - Social media campaign 	<ul style="list-style-type: none"> - Advertisement website study funder - Promoting word-of-mouth - In-store recruitment 					
Supermarkets #5 - #8			<ul style="list-style-type: none"> - Local (online) media - Flyers/letters to households - Post supermarket's Facebook timeline - Flyers and posters 	<ul style="list-style-type: none"> - Supermarket's customer panel mailing - Advertisement website study funder - Social media campaign - Promoting word-of-mouth - In-store recruitment 				
Supermarkets #9 - #12						<ul style="list-style-type: none"> - Local (online) media - Flyers/letters to households - Post supermarket's Facebook timeline - Flyers and posters 	<ul style="list-style-type: none"> - Supermarket's customer panel mailing - Advertisement website study funder - Social media campaign - Promoting word-of-mouth - In-store recruitment 	

Supplementary Table 2. Detailed breakdown of material costs and of time per recruitment strategy

	Total material cost (€)	Cost (€) for paper/print materials	Cost (€) for mail	Cost (€) for straff travel	Cost (€) for use of service	Total time (hours)	Time (hours) for development of materials	Time (hours) for implementing/preparing materials
Media news article	0	0	0	0	0	10	6	4
Flyers in the supermarket	640	490	0	150	0	22	12	10
Posters	290	140	0	150	0	22	12	10
Mailing of flyers and recruitment letters	27,981	2535	25446	0	0	1120	5	1115
Social media advertisements	3100	0	0	0	3100	10	2	8
Email to supermarket customer panel	0	0	0	0	0	2	0	2
Advertisement on website of the Dutch Heart Foundation	0	0	0	0	0	2	0	2
Word of mouth	0	0	0	0	0	8	1	7
In-store recruitment	1,583	0	0	1583	0	276	1	275

Supplementary Table 3. Population characteristics of the Supreme Nudge trial (n=391) presented by supermarket clusters (n=12).

	Store #1	Store #2	Store #3	Store #4	Store #5	Store #6	Store #7	Store #8	Store #9	Store #10	Store #11	Store #12
	(n=47)	(n=38)	(n=30)	(n=21)	(n=34)	(n=36)	(n=36)	(n=13)	(n=39)	(n=46)	(n=21)	(n=30)
Age, years (mean (SD))	56.9 (8.6)	61.1 (9.4)	55.8 (10.0)	56.5 (10.3)	57.1 (14.0)	60.1 (13.3)	55.1 (9.4)	56.9 (12.2)	59.8 (9.9)	58.4 (10.5)	59.0 (11.9)	53.9 (12.4)
<i>Educational attainment (n (%))</i>												
Low	6 (12.8)	10 (26.3)	7 (23.3)	7 (33.3)	7 (20.6)	8 (22.2)	6 (16.7)	7 (53.8)	10 (25.6)	12 (26.1)	8 (38.1)	8 (26.7)
Medium	22 (46.8)	16 (42.1)	11 (36.7)	9 (42.9)	10 (29.4)	7 (19.4)	8 (22.2)	3 (23.1)	14 (35.9)	14 (30.4)	9 (42.9)	10 (33.3)
High	19 (40.4)	12 (31.6)	12 (40.0)	5 (23.8)	17 (50.0)	21 (58.3)	22 (61.1)	3 (23.1)	15 (38.5)	20 (43.5)	4 (19.0)	12 (40.0)
Female (n (%))	36 (76.6)	26 (68.4)	22 (73.3)	12 (57.1)	27 (79.4)	28 (77.8)	27 (75.0)	10 (76.9)	28 (71.8)	32 (69.6)	13 (61.9)	21 (70.0)
Household size, n adults (median [IQR])	2.0 [0.0]	2.0 [0.8]	2.0 [1.0]	2.0 [0.0]	1.0 [1.0]	2.0 [1.0]	2.0 [1.0]	2.0 [1.0]	2.0 [1.0]	2.0 [0]	1.0 [1.0]	1.0 [1.0]
Household size, n children (median [IQR])	0.0 [1.0]	0.0 [0]	0.0 [1.0]	0.0 [1.0]	0.0 [1.0]	0.0 [0.3]	0.0 [1.0]	0.0 [2.0]	0.0 [0.0]	0.0 [1.0]	0.0 [0.0]	0.0 [1.0]
<i>Smoking status (n(%))</i>												
Current smoker	3 (6.4)	2 (5.3)	2 (6.7)	2 (9.5)	1 (2.9)	2 (5.6)	1 (2.8)	1 (7.7)	2 (5.1)	0 (0.0)	4 (19.0)	2 (6.7)
Irregular smoker	3 (6.4)	0 (0.0)	0 (0.0)	0 (0.0)	3 (8.8)	1 (2.8)	1 (2.8)	0 (0.0)	0 (0.0)	1 (2.2)	1 (4.8)	0 (0.0)
Former smoker	23 (48.9)	13 (34.2)	14 (46.7)	10 (47.6)	11 (32.4)	17 (47.2)	18 (50.0)	8 (61.5)	17 (43.6)	26 (56.5)	10 (47.6)	17 (56.7)
Never smoked	18 (38.3)	23 (60.5)	13 (43.3)	9 (42.9)	19 (55.9)	16 (44.4)	16 (44.4)	4 (30.8)	20 (51.3)	19 (41.3)	6 (28.6)	10 (33.3)
Prevalent type 2 diabetes (n(%))	3 (6.4)	5 (13.2)	3 (10.0)	5 (23.8)	0 (0.0)	1 (2.8)	2 (5.6)	1 (7.7)	2 (5.1)	0 (0.0)	1 (4.8)	1 (3.3)
Medication for type 2 diabetes (n(%))	3 (6.4)	5 (13.2)	3 (10.0)	4 (19.0)	0 (0.0)	1 (2.8)	2 (5.6)	1 (7.7)	2 (5.1)	0 (0.0)	1 (4.8)	1 (3.3)
Prevalent hypertension (n(%))	6 (12.8)	12 (31.6)	8 (26.7)	3 (14.3)	0 (0.0)	6 (16.7)	1 (2.8)	2 (15.4)	8 (20.5)	7 (15.2)	2 (9.5)	5 (16.7)
Medication for hypertension (n(%))	7 (14.9)	13 (34.2)	7 (23.3)	3 (14.3)	6 (17.6)	8 (22.2)	2 (5.6)	2 (15.4)	9 (23.1)	10 (21.7)	2 (9.5)	8 (26.7)
Prevalent hyperlipidaemia (n(%))	6 (12.8)	3 (7.9)	8 (26.7)	4 (19.0)	2 (5.9)	7 (19.4)	5 (13.9)	1 (7.7)	8 (20.5)	7 (15.2)	3 (14.3)	1 (3.3)
Medication for hyperlipidaemia (n(%))	7 (14.9)	5 (13.2)	3 (10.0)	3 (14.3)	4 (11.8)	7 (19.4)	3 (8.3)	2 (15.4)	5 (12.8)	7 (15.2)	3 (14.3)	6 (20.0)
Prevalent cardiovascular disease (n(%))	5 (10.6)	5 (13.2)	1 (3.3)	4 (19.0)	4 (11.8)	6 (16.7)	1 (2.8)	0 (0.0)	5 (12.8)	5 (10.9)	5 (23.8)	5 (16.7)

Low educational attainment: no education and primary education; Medium educational attainment: secondary educational attainments; High educational attainment: tertiary educational attainments.

Supplementary Table 4. Absolute numbers analyse per group for the top five most successful recruitment strategies and the sociodemographic variables age, sex and educational attainment (n=391).

	Age ^a , years	Sex		Educational attainment		
	Mean (SD)	Females, n (%)	Males, n (%)	Low, n (%)	Medium, n (%)	High, n (%)
Recruited via mailing of recruitment flyers and letters (n= 288)	57.2 (11.2)	208 (72.5)	79 (27.5)	64 (22.2)	100 (34.7)	124 (43.1)
Recruited via flyers in the supermarket (n=52)	60.0 (10.6)	42 (82.4)	9 (17.7)	18 (34.6)	16 (30.8)	18 (34.6)
Recruited via media news article (n=31)	60.0 (10.2)	25 (80.7)	6 (19.4)	9 (29.0)	12 (38.7)	10 (32.3)
Recruited via in-store recruitment (n=30)	57.8 (12.8)	22 (75.9)	7 (24.1)	4 (13.3)	10 (33.3)	16 (53.3)
Recruited via word-of-mouth (n=24)	57.3 (10.5)	14 (58.3)	10 (41.7)	7 (29.2)	7 (29.2)	10 (41.7)

Low educational attainment: no education and primary education; Medium educational attainment: secondary educational attainments; High educational attainment: tertiary educational attainments. ^an=2 missing values.

Supplementary Table 5. Absolute numbers analysed for elements of at-home measurement of cardiometabolic risk markers and the sociodemographic variables age, sex and educational attainment (n=391).

	Age ^a , years	Sex		Educational attainment		
	Mean (SD)	Females, n (%)	Males, n (%)	Low, n (%)	Medium, n (%)	High, n (%)
Participants requesting a home-visit (n=68)	58.5 (11.8)	49 (72.1)	19 (27.9)	21 (30.9)	18 (26.5)	29 (42.6)
Failed first attempt of blood measurement (n=86)	60.7 (10.0)	64 (74.4)	22 (25.6)	29 (33.7)	28 (32.6)	29 (33.7)
Non-completers HbA1c measurement, (n=22)	49.2 (12.1)	15 (75.0)	5 (25.0)	6 (27.3)	5 (22.7)	11 (50.0)
Non-completers LDL-cholesterol measurement (n=49)	54.8 (12.7)	32 (68.1)	15 (31.9)	16 (32.7)	13 (26.5)	20 (40.8)
Non-completers waist circumference measurement (n=8)	56.9 (9.0)	2 (33.3)	4 (66.7)	3 (37.5)	1 (12.5)	4 (50.0)

Low educational attainment: no education and primary education; Medium educational attainment: secondary educational attainments; High educational attainment: tertiary educational attainments. ^an=2 missing values.