

Additional Tables

Supplemental Table 1 Total grams (% of total) of sugar consumed by source, by gender and total sample

Source of sugar	Females n=112		Males n=16		Baseline participants N=128	
	Total grams	%	Total grams	%	Total grams	%
Sweets and lollies (e.g., candies, marshmallow)	32237	14	4028	12	36265	14
Cakes, muffins, cupcakes and deserts	30603	14	3970	12	34573	13
Plain chocolate including milk or dark chocolate	26505	12	1198	4	27703	11
Pastries, slices, donuts and sweet biscuits	16187	7	2643	8	18830	7
Flavoured hot beverage (e.g., hot chocolate, vanilla latte)	15699	7	2557	8	18256	7
Non-diet soft drinks (e.g., cola, lemonade, ginger beer)	12585	6	2045	6	14630	6
Fruit juices or drinks (e.g., orange juice, tropical fruit drink)	12043	5	2206	7	14249	6
Chocolate bars (e.g., Mars, Twix)	11437	5	1879	6	13316	5
Milkshakes and smoothies	10063	4	2225	7	12288	5
Ice cream	9033	4	2337	7	11370	4
Sugar (e.g., white sugar, raw sugar)	10075	4	1053	3	11128	4
Breakfast cereals (e.g., muesli, Coco Pops)	8705	4	1085	3	9790	4
Sauces, salad dressings and chutneys	7168	3	1086	3	8254	3
Jam, marmalade and spreads (e.g., Nutella)	4776	2	1009	3	5785	2
Honey or natural syrups (e.g., maple syrup)	3867	2	683	2	4550	2
Yoghurt (sweetened)	3997	2	468	1	4465	2
Fruit and nut bars (e.g., muesli and snack bars)	4189	2	162	1	4351	2
Energy drinks (e.g., Red bull, Mother)	1675	1	867	3	2542	1
Sport drinks (e.g., Powerade, Gatorade)	1822	1	413	1	2235	1
Flavoured milk drinks	960	<1	144	<1	1104	<1
Baked beans and spaghetti	811	<1	152	<1	963	<1
Canned fruit in syrup (e.g., peaches, pineapple)	646	<1	97	<1	743	<1
Total	225083	100	32307	100	257390	100

Supplementary 2 Baseline participant characteristics and comparisons for post-treatment evaluation completion

Demographic and baseline measurement scores	Post-treatment evaluation		Group comparisons
	Did not complete <i>n</i> =32 (<i>n</i> , %)	Completed <i>n</i> =96 (<i>n</i> , %)	
Gender, Male	5 (15.6)	11 (11.5)	$\chi^2(1)=.38$, <i>p</i> =.55
Age, years (<i>M</i> , <i>SD</i>)	38.75 (14.14)	41.03 (15.47)	<i>t</i> (126)= -0.74, <i>p</i> =.46
Ethnicity			$\chi^2(3)=4.47$, <i>p</i> =.22
White European	22 (68.8)	76 (79.2)	
Asian	8 (25.0)	10 (10.4)	
Māori	1 (3.1)	6 (6.3)	
Pasifika	1 (3.10)	4 (4.2)	
Employment			$\chi^2(3)=4.16$, <i>p</i> =.25
Employed full time	17 (53.1)	38 (39.6)	
Employed part time	3 (9.4)	25 (26.0)	
Unemployed	5 (15.6)	13 (13.5)	
Student	7 (21.9)	20 (20.8)	
Income			$\chi^2(4)=3.44$, <i>p</i> =.49
Less than \$20,000	1 (3.1)	13 (13.5)	
\$20,001-\$40,000	4 (12.5)	10 (10.4)	
\$40,001-\$70,000	8 (25.0)	16 (16.7)	
\$70,001-\$100,000	8 (25.0)	22 (22.9)	
\$100,001+	11 (34.4)	35 (36.5)	
NZ index of deprivation (<i>M</i> , <i>SD</i>)	2.09 (1.25)	1.84 (1.18)	<i>t</i> (126)= -1.02, <i>p</i> =.31
Sugar consumption (grams)			
Total for 30 days (median, IQRs)	1668.5 (1026.8, 2660.5)	1662.5 (1017.0, 2602.0)	$\chi^2(1)=.04$, <i>p</i> =.84
Daily average (median, IQRs)	55.62 (34.2, 88.7)	55.42 (33.9, 86.7)	$\chi^2(1)=.04$ <i>p</i> =.84
Yale Food Addiction symptoms (<i>M</i> , <i>SD</i>)	2.16 (2.36)	2.71 (3.00)	<i>t</i> (126)= -0.95, <i>p</i> =.35
Yale Food Addiction categories			$\chi^2(3)=9.12$, <i>p</i> =.03

No food addiction	25 (78.1)	73 (76.0)	
Mild food addiction	0 (0)	2 (2.1)	
Moderate food addiction	6 (18.8)	5 (5.2)	
Severe food addiction	1 (3.1)	16 (16.7)	
Situational Efficacy (<i>M, SD</i>)	34.34 (14.77)	37.22 (19.81)	<i>t</i> (126)=-.75, p=.45
Brief Substance Craving (<i>M, SD</i>)	6.03 (1.82)	5.97 (2.23)	<i>t</i> (126)=0.14, p=.89
Craving in past 24 hours (<i>M, SD</i>)	3.69 (2.72)	3.56 (2.38)	<i>t</i> (126)=-.25, p=.81
Kessler 6 Psychological Distress (<i>M, SD</i>)	12.00 (3.69)	12.46 (3.95)	<i>t</i> (126)=-0.58, p=.56
WHO Wellbeing Index (<i>M, SD</i>)	53.38 (16.68)	52.13 (18.50)	<i>t</i> (126)= 0.34, p=.74
BMI score (<i>M, SD</i>)	27.55 (6.90)	28.15 (6.54)	<i>t</i> (126)=-.44, p=.67

Supplementary 3 Baseline participant characteristics and comparisons for intervention protocol adherence

Demographic and baseline measurement scores	Intervention adherence		Group comparisons
	Did not adhere to protocol n=34	Adhered to protocol n=94	
	(n, %)	(n, %)	
Gender, Male	6 (17.6)	10 (10.6)	$\chi^2(1)=0.29, p=.36$
Age, years (<i>M, SD</i>)	42.29 (15.0)	39.8 (15.20)	$t(126)= 0.82, p=.41$
Ethnicity			$\chi^2(3)=1.65, p=.65$
White European	24 (70.6)	74 (78.7)	
Asian	5 (14.7)	13 (13.8)	
Māori	3 (8.8)	4 (4.3)	
Pasifika	2 (5.9)	3 (3.2)	
Employment			$\chi^2(3)=1.19, p=.76$
Employed full time	17 (50.0)	38 (40.4)	
Employed part time	6 (17.6)	22 (23.4)	
Unemployed	5 (14.7)	13 (13.8)	
Student	6 (17.6)	21 (22.3)	
Income			$\chi^2(4)=5.51, p=.24$
Less than \$20,000	1 (2.9)	13 (13.8)	
\$20,001-\$40,000	5 (14.7)	9 (9.6)	
\$40,001-\$70,000	9 (26.5)	15 (16.0)	
\$70,001-\$100,000	9 (26.5)	21 (22.3)	
\$100,001+	10 (29.4)	36 (38.3)	
NZ index of deprivation (<i>M, SD</i>)	2.09 (1.36)	1.84 (1.14)	$t(126)=1.03, p=.30$
Sugar consumption (grams)			
Total for 30 days (median, IQRs)	1488.5 (1075.0, 2434.3)	1709.0 (994.3, 2619)	$\chi^2(1)=1.44, p=.23$
Daily average (median, IQRs)	49.62 (35.8, 81.1)	59.97 (33.1, 87.3)	$\chi^2(1)=1.44, p=.23$
Yale Food Addiction symptoms (<i>M, SD</i>)	2.38 (2.62)	2.64 (2.95)	$t(126)= -0.45, p=.66$

Yale Food Addiction categories			$\chi^2(3)=3.43, p=.33$
No food addiction	26 (76.5)	72 (76.6)	
Mild food addiction	0 (0)	2 (2.1)	
Moderate food addiction	5 (14.7)	6 (6.4)	
Severe food addiction	3 (8.8)	14 (14.9)	
Situational Efficacy (<i>M, SD</i>)	34.97 (16.90)	37.05 (19.32)	<i>t</i> (126)=-0.56, <i>p</i> =.58
Brief Substance Craving (<i>M, SD</i>)	6.21 (1.86)	5.90 (2.22)	<i>t</i> (126)=0.71, <i>p</i> =.48
Craving in past 24 hours (<i>M, SD</i>)	3.59 (2.64)	3.60 (2.41)	<i>t</i> (126)=-0.02, <i>p</i> =.99
Kessler 6 Psychological Distress (<i>M, SD</i>)	11.91 (4.00)	12.50 (3.84)	<i>t</i> (126)=-0.76, <i>p</i> =.45
WHO Wellbeing Index (<i>M, SD</i>)	52.24 (16.39)	52.51 (18.64)	<i>t</i> (128)=-0.76, <i>p</i> =.94
BMI score (<i>M, SD</i>)	27.44 (6.14)	28.21 (6.79)	<i>t</i> (128)=-0.58, <i>p</i> =.56
Completed goal setting (Yes)	3 (8.8)	94 (100)	$\chi^2(1)=113.10, p<.001$
Set start date (Yes)	2 (5.9)	89 (94.7)	$\chi^2(1)=95.80, p<.001$
Completed planning#	0 (0)	94 (100)	$\chi^2(1)=128.0, p<.001$
2 action plans, 1 coping plan	<i>Not applicable</i>	16 (17.0)	
2 action plans, >1 coping plan	<i>Not applicable</i>	78 (83.0)	
1 action plan, ≥ 1 coping plan	2 (6)	0 (0)	
0 action plan, 0 coping plan	32 (94)	0 (0)	
Attendance at in-person assessment	5 (14.7)	69 (73.4)	$\chi^2(1)=35.27, p<.001$

Note: #Completed planning required goal setting plus completion of two action plans with a minimum of one coping plan for each.

Supplemental Table 4 Partial correlations with post-sugar consumption (n=128)

Correlations controlled for baseline measures#	Post Sugar Consumption	Age	Gender	Income	Intervention	Post Situation Self-efficacy	Post Cravings total	Post K6 Psychological distress	Post WHO well-being	Post Cravings /24 hours	Post Food Addiction Symptoms
Age	-0.08										
Gender	-0.01	-0.10									
Income	0.09	0.21*	0.07								
Level of engagement	-0.21*	0.04	-0.05	0.13							
Self-efficacy	-0.44***	0.00	0.04	-0.09	0.08						
Craving total	0.42***	-0.02	-0.04	-0.03	-0.18	-0.47***					
Psychological distress	0.37***	-0.18	0.19	0.12	-0.09	-0.50***	0.38***				
WHO well-being	-0.39***	0.21*	-0.14	-0.13	0.16	0.59***	-0.42***	-0.69***			
Cravings in 24 hours	0.17	-0.05	0.23*	0.13	-0.07	-0.42***	0.73***	0.55***	-0.51***		
Food Addiction symptoms	0.73***	-0.03	-0.06	0.05	-0.19	-0.30***	0.41***	0.39***	-0.37***	0.24*	
BMI	0.29**	-0.09	0.06	-0.07	-0.13	-0.04	0.12	-0.07	-0.02	-0.02	0.16

Note: #Partial correlations controlling for baseline measures of sugar consumption, situational self-efficacy, cravings total, cravings 24 hours, K6 psychological distress, WHO well-being, Food Addiction symptoms and BMI. Results are based on 1000 bootstrap samples. Bold indicates significant correlations with post-sugar consumption. * p ≤ .05, ** p ≤ .01, *** p ≤ .001

Supplemental Table 5 Hierarchical Regression Analyses predicting daily follow-up sugar consumption ($n=128$; bootstrap)

Independent Variable (IV)	B	Bias	Std. Error	Sig. (2-tailed)	95% Confidence	
					Interval	Lower
					Upper	
1 (Constant)	-3.49	0.30	24.56	0.884	-52.71	46.26
Baseline sugar consumption	0.53	-0.01	0.13	0.002	0.26	0.76
Baseline situational efficacy	-0.06	-0.01	0.17	0.738	-0.39	0.29
Baseline craving total	-0.73	-0.05	1.61	0.651	-3.96	2.52
Baseline psychological distress	0.42	0.00	1.06	0.701	-1.65	2.48
Baseline wellbeing	0.03	0.01	0.19	0.882	-0.34	0.43
2 (Constant)	4.89	-1.33	32.98	0.889	-59.47	70.15
Baseline sugar consumption	0.49	-0.001	0.10	0.001	0.30	0.68
Baseline situational efficacy	0.26	-0.02	0.24	0.292	-0.18	0.75
Baseline craving total	-2.75	-0.08	1.34	0.048	-5.50	-0.17
Baseline psychological distress	-0.66	-0.11	1.05	0.570	-2.73	1.37
Baseline wellbeing	0.03	0.02	0.19	0.868	-0.30	0.43
Follow-up situational efficacy	-0.66	0.03	0.25	0.015	-1.15	-0.16
Follow-up craving total	4.07	0.06	1.36	0.003	1.66	6.94
Follow-up psychological distress	1.97	0.27	1.77	0.292	-1.03	5.58
Follow-up wellbeing	0.06	-0.03	0.23	0.775	-0.46	0.53
3 (Constant)	13.33	-1.32	31.73	0.691	-49.90	74.26

Baseline sugar consumption	0.50	-0.00	0.09	0.001	0.30	0.67
Baseline situational efficacy	0.24	-0.01	0.22	0.285	-0.18	0.71
Baseline craving total	-2.71	-0.05	1.33	0.047	-5.45	-0.11
Baseline psychological distress	-0.33	-0.12	1.05	0.794	-2.46	1.71
Baseline wellbeing	0.02	0.02	0.19	0.887	-0.32	0.44
Follow-up situational efficacy	-0.60	0.02	0.23	0.017	-1.03	-0.14
Follow-up craving total	3.37	0.07	1.36	0.014	0.84	6.37
Follow-up psychological distress	1.90	0.24	1.66	0.274	-0.90	5.21
Follow-up wellbeing	0.08	-0.03	0.24	0.712	-0.47	0.51
Engaged with intervention (Y/N)	-16.87	1.08	6.15	0.018	-28.77	-3.92

Note: bold text indicates significant predictor