

Table 3 Pairwise comparison of mean scores for the intake frequencies for the food groups over time for the intervention (n = 68) and control (n = 70) groups

Variable/ group	Test (intervention group)	Test (control group)	Mean difference intervention & control groups	SE	P-value	95% CI for difference		d
						Lower	Upper	
Cereals & grains^a								
Intervention group	Baseline	Immediately	-0.06	0.05	1.000	-0.22	0.09	0.03
	Baseline	Follow-up	-0.01	0.04	1.000	-0.13	0.11	
Control group	Immediately	Follow-up	0.05	0.05	1.000	-0.08	0.19	0.73
	Baseline	Immediately	0.46*	0.10	< 0.001	0.17	0.75	
	Baseline	Follow-up	0.45*	0.10	< 0.001	0.16	0.73	
	Immediately	Follow-up	-0.01	0.05	1.000	-0.17	0.15	
Fish, poultry & meat products^a								
Intervention group	Baseline	Immediately	0.03	0.02	1.000	-0.04	0.09	0.14
	Baseline	Follow-up	0.02	0.02	1.000	-0.04	0.08	
Control group	Immediately	Follow-up	-0.01	0.02	1.000	-0.07	0.06	0.20
	Baseline	Immediately	0.09	0.06	1.000	-0.08	0.25	
	Baseline	Follow-up	0.07	0.06	1.000	-0.10	0.24	
	Immediately	Follow-up	-0.01	0.01	1.000	-0.06	0.03	
Dairy products								
Intervention group	Baseline	Immediately	-0.063*	0.01	< 0.001	-0.09	-0.04	1.15
	Baseline	Follow-up	-0.075*	0.01	< 0.001	-0.10	-0.05	
Control group	Immediately	Follow-up	-0.01	0.01	0.890	-0.03	0.01	0.20
	Baseline	Immediately	0.02	0.02	1.000	-0.03	0.06	
	Baseline	Follow-up	0.02	0.02	1.000	-0.03	0.07	
	Immediately	Follow-up	0.00	0.00	1.000	-0.01	0.01	
Mixed dishes								
Intervention group	Baseline	Immediately	0.030*	0.01	< 0.001	0.01	0.05	0.28
	Baseline	Follow-up	-0.07	0.04	1.000	-0.20	0.05	
Control group	Immediately	Follow-up	-0.10	0.04	0.210	-0.23	0.02	0.17
	Baseline	Immediately	-0.11	0.08	1.000	-0.36	0.13	
	Baseline	Follow-up	-0.07	0.07	1.000	-0.27	0.13	
	Immediately	Follow-up	0.05	0.09	1.000	-0.21	0.30	
Sweetened beverages^a								
Intervention group	Baseline	Immediately	0.11*	0.02	< 0.001	0.07	0.16	0.99
	Baseline	Follow-up	0.12*	0.02	< 0.001	0.07	0.16	
Control group	Immediately	Follow-up	0.00	0.01	1.000	-0.03	0.04	0.11
	Baseline	Immediately	-0.01	0.03	1.000	-0.09	0.07	
	Baseline	Follow-up	-0.02	0.03	1.000	-0.11	0.06	
	Immediately	Follow-up	-0.02	0.03	1.000	-0.09	0.06	
Sweet baked goods								
Intervention group	Baseline	Immediately	0.03*	0.01	< 0.001	0.02	0.04	0.49
	Baseline	Follow-up	0.02*	0.01	0.010	0.00	0.04	
Control group	Immediately	Follow-up	-0.01	0.01	1.000	-0.03	0.01	0.32
	Baseline	Immediately	0.01	0.01	1.000	-0.01	0.03	
	Baseline	Follow-up	0.01	0.01	0.980	-0.01	0.03	
	Immediately	Follow-up	0.00	0.01	1.000	-0.01	0.02	

Table 3 Pairwise comparison of mean scores for the intake frequencies for the food groups over time for the intervention (n = 68) and control (n = 70) groups (concluded)

Variable/ group	Test (intervention group)	Test (control group)	Mean difference intervention & control groups	SE	P-value	95% CI for difference		d
						Lower	Upper	
Fruits & vegetables								
Intervention group	Baseline	Immediately	-0.010	0.005	0.663	-0.024	0.004	0.60
	Baseline	Follow-up	-0.04*	0.012	0.003	-0.077	-0.009	
	Immediately	Follow-up	-0.03	0.012	0.069	-0.067	0.001	
Control group	Baseline	Immediately	-0.002	0.003	1.000	-0.010	0.005	0.01
	Baseline	Follow-up	-0.002	0.004	1.000	-0.013	0.009	
	Immediately	Follow-up	0.001	0.003	1.000	-0.008	0.009	
Dietary energy								
Intervention group	Baseline	Immediately	227.60	172.66	1.000	-279.19	734.38	0.20
	Baseline	Follow-up	279.57	228.98	1.000	-392.52	951.67	
	Immediately	Follow-up	51.98	201.03	1.000	-538.10	642.05	
Control group	Baseline	Immediately	607.11	182.94*	0.010	70.13	1144.09	0.27
	Baseline	Follow-up	368.21	218.99	1.000	-274.58	1011.00	
	Immediately	Follow-up	-238.90	140.69	1.000	-651.84	174.03	
Carbohydrates								
Intervention group	Baseline	Immediately	-140.20	98.21	1.000	-428.46	148.06	0.08
	Baseline	Follow-up	-27.88	46.70	1.000	-164.96	109.20	
	Immediately	Follow-up	112.32	102.94	1.000	-189.82	414.46	
Control group	Baseline	Immediately	30.12	75.61	1.000	-191.82	252.06	0.01
	Baseline	Follow-up	-2.55	81.22	1.000	-240.96	235.86	
	Immediately	Follow up	-32.67	77.72	1.000	-260.79	195.45	
Protein								
Intervention group	Baseline	Immediately	-1.41	11.58	1.000	-35.40	32.57	0.04
	Baseline	Follow-up	-3.50	13.17	1.000	-42.15	35.15	
	Immediately	Follow up	-2.09	14.33	1.000	-44.16	39.98	
Control group	Baseline	Immediately	51.42	41.24	1.000	-69.62	172.45	0.22
	Baseline	Follow-up	56.80	42.35	1.000	-67.51	181.11	
	Immediately	Follow-up	5.38	32.58	1.000	-90.24	101.01	
Fat								
Intervention group	Baseline	Immediately	-35.74	28.26	1.000	3.57	6.26	0.03
	Baseline	Follow-up	0.95	10.59	1.000	3.56	6.14	
	Immediately	Follow-up	36.69	29.00	1.000	-0.40	0.28	
Control group	Baseline	Immediately	10.55	23.46	1.000	-1.79	-0.11	0.08
	Baseline	Follow-up	13.45	25.56	1.000	-1.90	-0.31	
	Immediately	Follow-up	2.91	23.83	1.000	-0.67	0.36	

SE = standard error of the sample.

CI = confidence interval.

d = Cohen effect size.

*P-value < 0.050; Bonferroni adjustment for multiple comparisons.

°Covariate: adjusted mean difference using baseline score.

Immediately = immediately after the 3-month intervention.

Follow-up = 3-months after the end of the intervention.

Discussion

Dietary patterns are shifting with increasing urbanization, lifestyle changes and increased production of processed foods with people currently consuming greater quantities of sodium, sugar, fat and salt. Consumption of cooking oil and salt is now double the recommended daily intake. Many people

consume inadequate amounts of fibre, fruits and vegetables (1). This unhealthy eating behaviour can lead to noncommunicable diseases and obesity (2). A seminar was held for mothers to encourage their daughters to replace their intake of unhealthy food with healthy food. The sessions on nutrition information and healthy activities, which were held for the intervention group,