

Supplemental Table 1 Portion means for controls

Eating context	Energy density	Taste	Visit 1 ¹	Visit 2 ¹	Visit 1 – Visit 2 ²	P ³
Healthy	Low	Sweet	284.11 ± 46.61	297.81 ± 46.55	-13.71 ± 23.60	1.000
		Salty	153.10 ± 24.63	129.84 ± 20.27	23.26 ± 10.06	1.000
	High	Sweet	53.34 ± 10.57	58.13 ± 10.20	-4.79 ± 6.12	1.000
		Salty	27.18 ± 3.72	32.32 ± 5.14	-5.14 ± 3.44	1.000
Typical	Low	Sweet	272.08 ± 39.47	240.61 ± 38.34	31.47 ± 29.67	1.000
		Salty	91.59 ± 16.57	62.65 ± 8.67	28.94 ± 13.03	1.000
	High	Sweet	122.63 ± 16.13	111.54 ± 15.01	11.09 ± 9.73	1.000
		Salty	65.85 ± 7.62	59.90 ± 7.80	5.96 ± 6.68	1.000
Satisfied	Low	Sweet	276.27 ± 38.24	243.88 ± 29.55	32.38 ± 19.27	1.000
		Salty	124.78 ± 20.76	100.17 ± 20.54	24.61 ± 10.32	1.000
	High	Sweet	125.16 ± 13.57	110.42 ± 15.79	14.75 ± 8.87	1.000
		Salty	57.57 ± 5.20	56.19 ± 5.98	1.38 ± 4.14	1.000
Maximum	Low	Sweet	333.09 ± 35.76	328.95 ± 33.70	4.14 ± 23.85	1.000
		Salty	120.14 ± 17.71	105.36 ± 15.62	14.78 ± 9.03	1.000
	High	Sweet	159.39 ± 18.56	142.41 ± 18.30	16.98 ± 14.51	1.000
		Salty	75.81 ± 7.98	79.62 ± 8.04	-3.81 ± 5.89	1.000
Desired	Low	Sweet	441.25 ± 51.11	359.87 ± 44.00	81.38 ± 32.07	0.853
		Salty	149.90 ± 23.59	105.15 ± 15.39	44.75 ± 14.75	1.000
	High	Sweet	213.50 ± 22.08	156.69 ± 19.98	56.81 ± 12.94	1.000
		Salty	95.63 ± 9.98	83.47 ± 8.50	12.16 ± 5.48	1.000

¹ Values are mean portions (g) ± SEM for controls ($n = 29$).

² Values are mean inter-visit portion differences (g) ± SEM for controls.

³ P-value is the probability that the two means (visit 1 and visit 2) are different from each other and is Tukey-adjusted. No p-values were significant.

Supplemental Table 2 Portion means for patients

Eating context	Energy density	Taste	Visit 1 ¹	Visit 2 ¹	Visit 1 – Visit 2 ²	P ³
Healthy	Low	Sweet	286.56 ± 33.21	230.83 ± 33.84	55.72 ± 28.95	1.000
		Salty	140.27 ± 23.27	115.37 ± 19.58	24.90 ± 15.21	1.000
	High	Sweet	30.05 ± 4.86	19.31 ± 3.06	10.74 ± 3.99	1.000
		Salty	22.12 ± 2.91	14.55 ± 1.67	7.57 ± 2.65	1.000
Typical	Low	Sweet	382.54 ± 28.32	218.94 ± 39.43	163.60 ± 41.26	<0.0001
		Salty	112.09 ± 17.60	83.27 ± 17.96	28.82 ± 16.29	1.000
	High	Sweet	132.47 ± 14.39	63.30 ± 11.45	69.17 ± 13.09	0.992
		Salty	77.48 ± 7.23	32.55 ± 5.58	44.93 ± 7.33	1.000
Satisfied	Low	Sweet	327.28 ± 25.73	181.17 ± 22.99	146.11 ± 21.42	<0.0001
		Salty	113.93 ± 18.58	68.91 ± 12.28	45.07 ± 11.94	1.000
	High	Sweet	110.36 ± 13.11	45.19 ± 7.29	65.17 ± 9.66	0.998
		Salty	63.22 ± 6.10	24.04 ± 3.41	39.17 ± 5.07	1.000
Maximum	Low	Sweet	453.06 ± 36.16	171.21 ± 30.92	281.85 ± 47.24	<0.0001
		Salty	135.82 ± 21.83	76.69 ± 21.35	59.13 ± 16.27	1.000
	High	Sweet	148.61 ± 13.22	40.32 ± 5.65	108.29 ± 11.51	0.116
		Salty	89.52 ± 6.30	22.08 ± 2.52	67.44 ± 6.37	0.995
Desired	Low	Sweet	642.15 ± 46.07	386.85 ± 44.99	255.30 ± 42.95	<0.0001
		Salty	172.81 ± 27.82	119.88 ± 20.16	52.93 ± 24.33	1.000
	High	Sweet	215.75 ± 20.97	113.83 ± 16.27	101.92 ± 16.60	0.233
		Salty	117.80 ± 9.61	65.87 ± 8.56	51.93 ± 9.00	1.000

¹ Values are mean portions (g) ± SEM for patients ($n = 29$).

² Values are mean inter-visit portion differences (g) ± SEM for patients.

³ P-value is the probability that the two means (visit 1 and visit 2) are different from each other and is Tukey-adjusted. No p-values were significant. Significant p-values are **bolded**.

Supplemental Table 3 Correlations of portions at baseline and follow-up¹

Eating context	Energy density	Taste	R ²	Pearson R	Spearman Rs	Slope ± SE	P	Intercept	P	t	P(t)
Healthy	Low	Sweet	0.724	0.814	0.781	0.850 ± 0.101	0.000	56.387	0.149	6.50	0.000
		Salty	0.779	0.872	0.881	0.726 ± 0.075	0.000	18.647	0.224	9.66	0.000
	High	Sweet	0.637	0.718	0.812	0.770 ± 0.112	0.000	17.077	0.059	7.23	0.000
		Salty	0.424	0.565	0.710	0.898 ± 0.202	0.000	7.905	0.253	5.24	0.000
Typical	Low	Sweet	0.293	0.636	0.596	0.525 ± 0.157	0.002	97.643	0.081	3.86	0.001
		Salty	0.492	0.553	0.755	0.367 ± 0.072	0.000	29.016	0.004	5.99	0.000
	High	Sweet	0.565	0.724	0.600	0.699 ± 0.118	0.000	25.782	0.156	3.90	0.001
		Salty	0.206	0.451	0.578	0.464 ± 0.176	0.013	29.320	0.040	3.68	0.001
Satisfied	Low	Sweet	0.775	0.849	0.829	0.680 ± 0.071	0.000	56.000	0.028	7.71	0.000
		Salty	0.728	0.822	0.805	0.844 ± 0.099	0.000	-5.090	0.760	7.06	0.000
	High	Sweet	0.606	0.752	0.750	0.906 ± 0.141	0.000	-2.981	0.884	5.89	0.000
		Salty	0.372	0.596	0.659	0.701 ± 0.175	0.000	15.809	0.169	4.55	0.000
Maximum	Low	Sweet	0.480	0.762	0.691	0.653 ± 0.131	0.000	111.388	0.035	4.97	0.000
		Salty	0.666	0.787	0.807	0.720 ± 0.098	0.000	18.885	0.217	7.10	0.000
	High	Sweet	0.383	0.557	0.694	0.610 ± 0.149	0.000	45.145	0.117	5.01	0.000
		Salty	0.488	0.625	0.712	0.704 ± 0.139	0.000	26.263	0.038	5.26	0.000
Desired	Low	Sweet	0.509	0.742	0.681	0.614 ± 0.116	0.000	88.905	0.151	4.83	0.000
		Salty	0.497	0.689	0.759	0.460 ± 0.089	0.000	36.156	0.047	6.06	0.000
	High	Sweet	0.516	0.710	0.690	0.650 ± 0.121	0.000	17.883	0.549	4.95	0.000
		Salty	0.560	0.739	0.650	0.638 ± 0.109	0.000	22.501	0.069	4.45	0.000

¹ Table of correlations (Pearson and Spearman) between baseline portions and follow-up portions (3 months later) in controls. P-values significant is $P < 0.0025$ (held to Bonferroni-correction for multiple comparisons, $\alpha = 0.0025$).

Supplemental Table 4 Means of snack type differences

Snack difference	Eating context	Patients (n = 29)		Controls (n = 29)	
		Visit 1	Visit 2	Visit 1	Visit 2
Sweet LoED – Sweet HiED	Healthy	256.51 ± 33.88**	211.52 ± 34.48**	230.77 ± 44.24**	239.68 ± 44.23**
	Typical	250.07 ± 31.09**	155.65 ± 39.33**	149.45 ± 31.64**	129.07 ± 32.09**
	Satisfied	216.93 ± 25.06**	135.98 ± 20.69**	151.10 ± 31.84**	133.47 ± 21.94**
	Maximum	304.45 ± 37.81**	130.89 ± 31.65**	173.7 ± 29.43**	186.54 ± 29.51**
	Desired	426.40 ± 41.58**	273.02 ± 41.86**	227.76 ± 41.32**	203.18 ± 37.78**
Salty LoED – Salty HiED	Healthy	118.14 ± 24.51*	100.82 ± 19.87	125.92 ± 24.40*	97.52 ± 19.19
	Typical	34.61 ± 18.85	50.72 ± 15.53	25.74 ± 14.21	2.75 ± 9.88
	Satisfied	50.71 ± 21.00	44.87 ± 12.29	67.21 ± 19.69	43.98 ± 18.77
	Maximum	46.30 ± 21.55	54.62 ± 21.84	44.33 ± 17.39	25.73 ± 16.04
	Desired	55.01 ± 28.04	54.01 ± 19.32	54.27 ± 23.87	21.68 ± 16.22
Sweet LoED – Salty LoED	Healthy	146.29 ± 29.29**	115.47 ± 26.25*	131.01 ± 30.01**	167.97 ± 30.89**
	Typical	270.46 ± 33.64**	135.68 ± 28.28	180.49 ± 31.32**	177.96 ± 35.79**
	Satisfied	213.36 ± 27.94**	112.26 ± 20.52	151.49 ± 28.32**	143.72 ± 23.45**
	Maximum	317.24 ± 39.45**	94.51 ± 28.43	212.95 ± 32.74**	223.59 ± 29.22**
	Desired	469.34 ± 48.95**	266.97 ± 43.99	291.35 ± 48.51**	254.72 ± 41.98**
Sweet HiED – Salty HiED	Healthy	7.93 ± 4.85	4.76 ± 3.30	26.16 ± 7.80	25.81 ± 7.70
	Typical	54.99 ± 12.95	30.74 ± 10.55	56.78 ± 14.45	51.65 ± 12.42
	Satisfied	47.14 ± 10.51	21.15 ± 6.12	67.59 ± 10.00	54.23 ± 11.81
	Maximum	59.09 ± 12.44	18.24 ± 4.53	83.58 ± 14.47	62.79 ± 14.86
	Desired	97.95 ± 16.32	47.96 ± 12.04	117.87 ± 15.71*	73.23 ± 16.11
Sweet HiED – Salty LoED	Healthy	-110.22 ± 24.85	-96.06 ± 20.27	-99.76 ± 26.15	-71.71 ± 21.12
	Typical	20.38 ± 21.37	-19.97 ± 19.70	31.04 ± 19.09	48.90 ± 15.59
	Satisfied	-3.57 ± 23.90	-23.72 ± 11.03	0.39 ± 20.90	10.25 ± 20.52
	Maximum	12.79 ± 24.60	-36.37 ± 22.18	39.25 ± 23.06	37.05 ± 22.71
	Desired	42.94 ± 31.24	-6.04 ± 23.72	63.60 ± 32.67	51.54 ± 25.28
Sweet LoED – Salty HiED	Healthy	264.43 ± 264.43**	216.29 ± 34.00**	256.93 ± 45.72**	265.49 ± 44.27**
	Typical	305.06 ± 28.38**	186.39 ± 35.10**	206.23 ± 36.19**	180.71 ± 24.87**
	Satisfied	264.07 ± 24.23**	157.13 ± 21.07**	218.70 ± 35.22**	187.69 ± 25.99**
	Maximum	363.54 ± 35.83**	149.13 ± 30.86**	257.28 ± 33.33**	249.33 ± 29.53**
	Desired	524.35 ± 43.26**	320.98 ± 42.06**	345.62 ± 44.74**	276.41 ± 39.03**

¹ Values are mean differences (g) ± SEM computed individually and in a five-way ANOVA. P-values (not shown) are Tukey-adjusted.

* $P < 0.05$; ** $P < 0.001$. LoED, low energy-dense snacks; HiED, high energy-dense snack

Supplemental Table 5 Overall Regression Model¹

Model		Parameters			
	Baseline weight	Question Portion	Response	Question Portion	
N	29	29	29	29	
R ²	0.1991				
F	443.17	222.93	1.93	2.14	
P	<.0001	<.0001	0.008	0.003	
Mean square		6544.29	56.62	34.1	
Semi-partial η^2		0.016	0.002	0.002	
Partial η^2		0.16	0.028	0.016	

Dependent	Independent	Snack type	Slope \pm SEE	t	P	Intercept \pm SE	t	P	
Weight loss (kg)	Baseline weight (kg)	-	0.144 \pm 0.008	18.45	<.0001	3.462 \pm 1.579	2.19	0.029	
		Healthy	Sweet LoED	0.002 \pm 0.003	0.79	0.432	4.127 \pm 1.458	2.83	0.005
			Sweet HiED	0.000 \pm 0.021	0.01	0.991	3.466 \pm 1.298	2.67	0.008
			Salty LoED	0.014 \pm 0.005	3.10	0.002	5.435 \pm 1.355	4.01	<.0001
			Salty HiED	0.015 \pm 0.029	0.52	0.603	3.787 \pm 1.317	2.88	0.004
		Typical	Sweet LoED	-0.002 \pm 0.002	-1.04	0.299	2.506 \pm 1.456	1.72	0.086
			Sweet HiED	-0.007 \pm 0.006	-1.03	0.302	2.585 \pm 1.433	1.80	0.072
			Salty LoED	0.004 \pm 0.005	0.76	0.448	3.911 \pm 1.326	2.95	0.003
			Salty HiED	-0.000 \pm 0.014	0.00	0.997	3.462 \pm 1.579	2.19	0.029
		Satisfied	Sweet LoED	-0.001 \pm 0.003	-0.32	0.750	3.122 \pm 1.546	2.02	0.044
			Sweet HiED	-0.009 \pm 0.007	-1.23	0.218	2.456 \pm 1.413	1.74	0.082
			Salty LoED	0.001 \pm 0.006	0.19	0.848	3.582 \pm 1.355	2.64	0.008
			Salty HiED	-0.010 \pm 0.015	-0.68	0.498	2.807 \pm 1.497	1.88	0.061
		Maximum	Sweet LoED	-0.003 \pm 0.002	-1.42	0.155	2.082 \pm 1.476	1.41	0.159
			Sweet HiED	-0.005 \pm 0.007	-0.76	0.448	2.71 \pm 1.511	1.79	0.073
			Salty LoED	-0.001 \pm 0.005	-0.28	0.779	3.282 \pm 1.334	2.46	0.014
			Salty HiED	-0.014 \pm 0.013	-1.10	0.272	2.166 \pm 1.634	1.33	0.185
		Desired	Sweet LoED	-0.005 \pm 0.002	-2.62	0.009	0.418 \pm 1.630	0.26	0.798
			Sweet HiED	-0.015 \pm 0.005	-2.94	0.003	0.257 \pm 1.609	0.16	0.873
			Salty LoED	-0.004 \pm 0.003	-1.26	0.208	2.713 \pm 1.315	2.06	0.039
	Salty HiED		-0.024 \pm 0.010	-2.30	0.022	0.67 \pm 1.681	0.40	0.690	

¹ Two-way ANOVA (eating context and snack type) ran on baseline portion data (independent) and 3-month weight loss (dependent), with baseline weight as a covariate. Weight loss = (3-month weight loss) – (baseline weight). P-values were Tukey-adjusted. Mean square and η^2 are from Type III hypothesis. Significant predictors are **bolded**. LoED, low-energy dense snacks; HiED, high-energy dense snacks.