

Online Appendix

Invitation Email

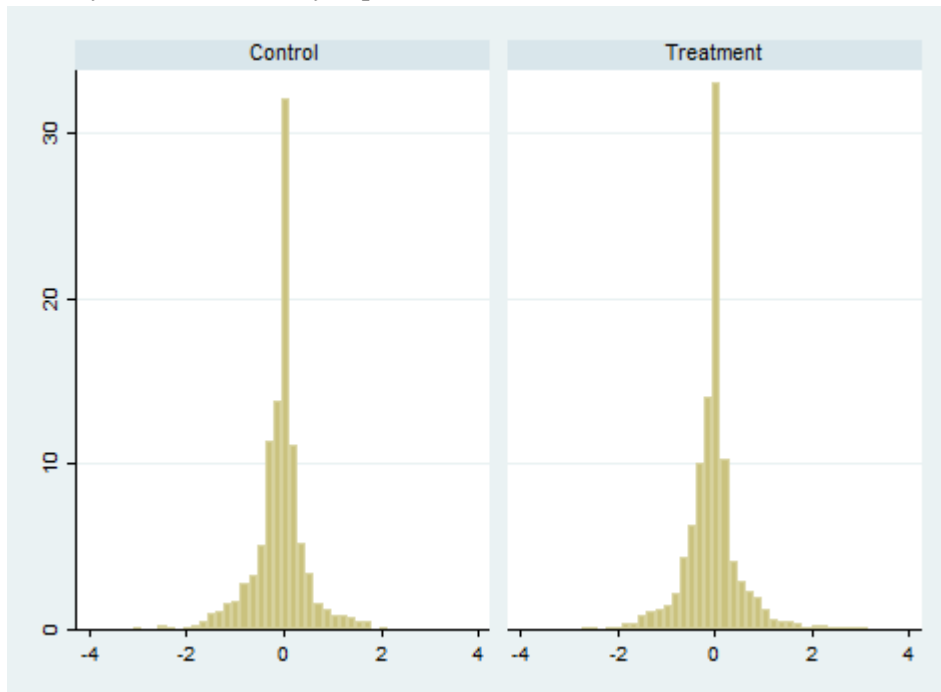
Subject: HealthyFood Commitment Survey and Study

Dear First Name,

*We would like to ask for your help by participating in a brief online survey about your grocery shopping habits and **Vitality HealthyFood™**. Currently, XX% of your purchases qualify for the **HealthyFood™** benefit. The study is investigating ways to help members improve that percentage.*

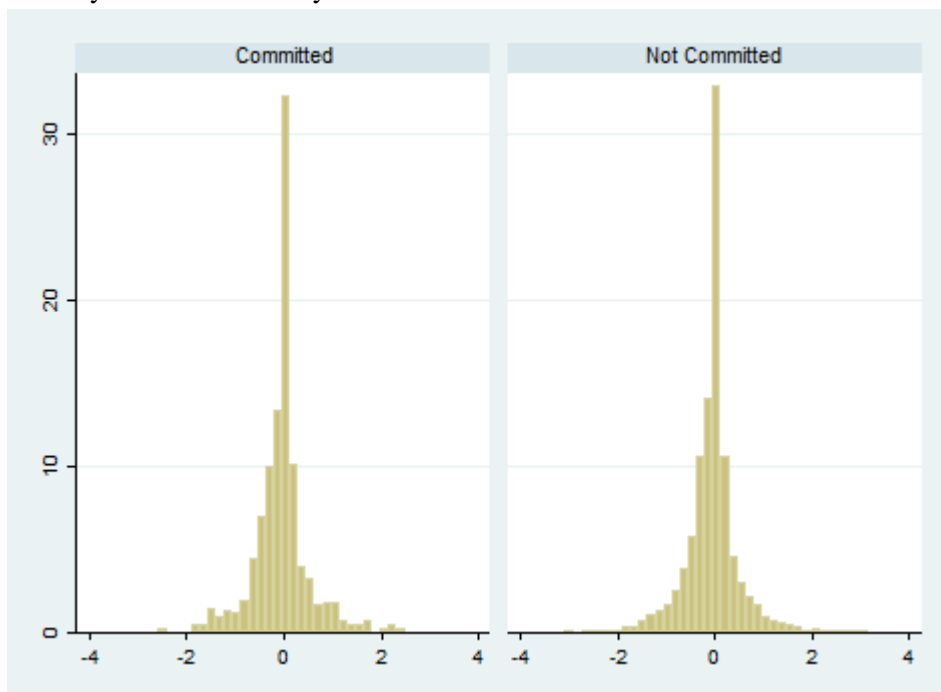
This survey will take about 10 minutes and, if you complete it, you will be entered into a draw to win a R1000 Pick n Pay gift card.

Figure A1.1 Histogram of change (during intervention vs. before intervention periods) in log number of monthly exercise events by experimental condition.



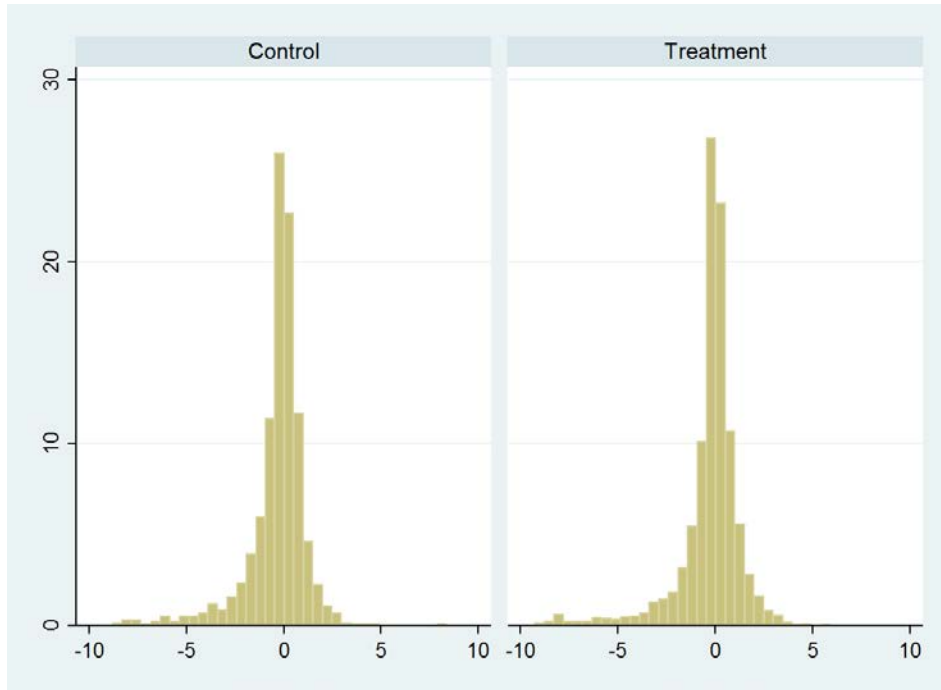
Kolmogorov-Smirnov test for equality of distributions, $D = 0.02$, $p = 0.91$.

Figure A1.2 Histogram of change (during intervention vs. before intervention periods) in log number of monthly exercise events by commitment status.



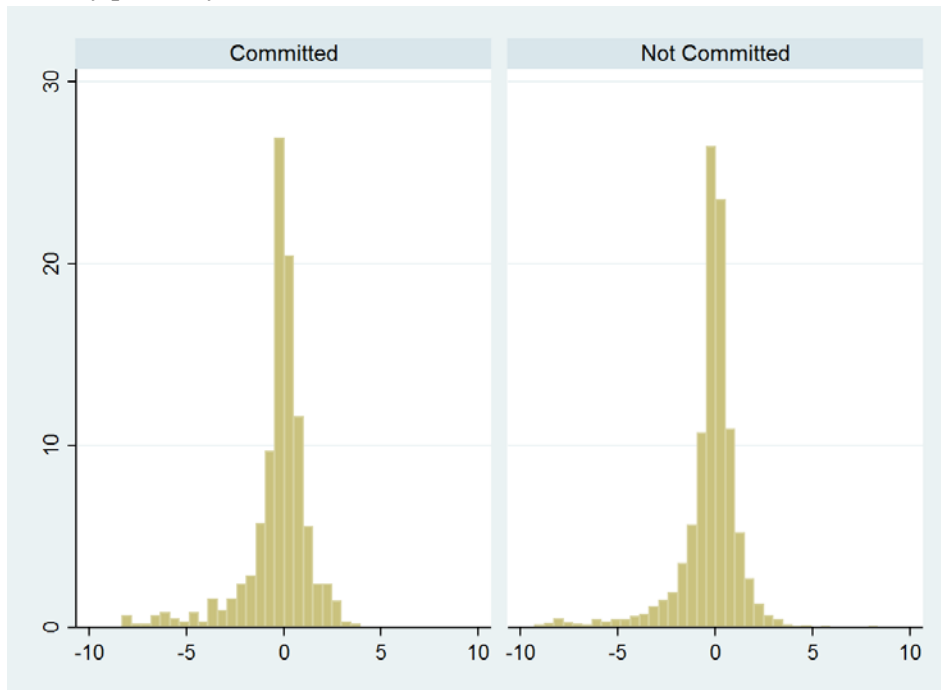
Kolmogorov-Smirnov test for equality of distributions, $D = 0.03$, $p = 0.76$.

Figure A2.1 Histogram of change (after intervention vs. before intervention periods) in log number of monthly points by experimental condition.



Kolmogorov-Smirnov test for equality of distributions, $D = 0.05$, $p = 0.02$

Figure A2.2 Histogram of change (after intervention vs. before intervention periods) in log number of monthly points by commitment status.



Kolmogorov-Smirnov test for equality of distributions, $D = 0.02$, $p = 0.91$.

Table A1.1 Examples of point earning activities under the Vitality Program

Activity*	Restriction	Points
Learn more about your eating habits from a dietitian	Maximum of 7500 points per year	2500 points per visit
Online fitness assessment	Once a year	1000 points
Glaucoma screening	Once a year for men and women 40 years and over	2500 points
Flu vaccination	Once a year	1000 points
Workout at partner gym	Maximum of 15,000 points per year	150 points per visit
Not smoking	Once a year	5000 points
Purchase HealthyFood items	Maximum of 1000 points per month	20 points per HealthyFood item

*The full list of activities is much more extensive. The examples above are provided for expositional purposes.

Table A1.2 Points needed to reach each status for a single member policy

Status	Single Member*	Benefit Examples⁺
Blue	0 points	<ul style="list-style-type: none"> • 15% discount on British Airways flights to select cities • 30% discount on select hotels in the Tsogo Sun group • 25% discount on HealthyFood purchased at Pick-n-Pay • 80% discount on club membership at partner gyms
Bronze	15,000 points	<ul style="list-style-type: none"> • 20% discount on British Airways flights to select cities • 35% discount on select hotels in the Tsogo Sun group • 25% discount on HealthyFood purchased at Pick-n-Pay • 80% discount on club membership at partner gyms
Silver	35,000 points	<ul style="list-style-type: none"> • 25% discount on British Airways flights to select cities • 40% discount on select hotels in the Tsogo Sun group • 25% discount on HealthyFood purchased at Pick-n-Pay • 80% discount on club membership at partner gyms
Gold	45,000 points	<ul style="list-style-type: none"> • 30% discount on British Airways flights to select cities • 45% discount on select hotels in the Tsogo Sun group • 25% discount on HealthyFood purchased at Pick-n-Pay • 80% discount on club membership at partner gyms
Diamond	Reach Gold three consecutive years	<ul style="list-style-type: none"> • 35% discount on British Airways flights to select cities • 50% discount on select hotels in the Tsogo Sun group • 25% discount on HealthyFood purchased at Pick-n-Pay • 80% discount on club membership at partner gyms

*Policies with more members need proportionally more points to reach the same status levels.

⁺The full list of benefits is more extensive. The examples above are provided for expositional purposes.

Table A2. Intention to treat analyses of the effect of the intervention on percentage of healthy items purchased during and after the commitment ended split by status level

	Non Gold Members (Fixed effects)	Gold Members (Fixed effects)	Non Gold Members (Robust SE)	Gold Members (Robust SE)
Treatment X During Intervention	0.55** (0.27)	1.23*** (0.32)	0.41 (0.35)	1.20*** (0.43)
Treatment X After Intervention	0.23 (0.28)	1.16*** (0.32)	0.10 (0.44)	1.10** (0.51)
Treatment Condition			-0.05 (0.53)	-0.47 (0.61)
During Intervention	-1.69*** (0.23)	-2.08*** (0.26)	-1.39*** (0.29)	-1.92*** (0.34)
After Intervention	-1.56*** (0.23)	-1.96*** (0.26)	-1.16*** (0.36)	-1.80*** (0.40)
Constant	30.78*** (0.09)	33.97*** (0.10)	30.65*** (0.45)	34.20*** (0.49)
Observations	38094	29514	38094	29514
Clusters	2350	1723	2350	1723

Note. The dependent variable is the percentage of monthly healthy food items purchased. 'Gold Members' includes all gold and diamond members as of January 1, 2012.

* $p < .1$; ** $p < .05$; *** $p < .01$

Table A3. The effect of change in percentage of healthy items purchased on change in exercise

	Full Sample	Non Gold Members	Gold Members
Change in percent healthy shopping	0.02 (0.03)	0.04 (0.07)	0.01 (0.02)
Constant	-0.02 (0.04)	0.01 (0.10)	-0.03 (0.03)
Observations	4029	2315	1714

Note. The dependent variable is the difference of log monthly exercise events from before the intervention period to during the intervention period. Forty-four members purchased no items from Pick-n-Pay during the intervention period. Because of their missing data, our sample is of 4,029 for these analyses.

* $p < .1$; ** $p < .05$; *** $p < .01$

Table A4. Intention to treat analyses of the effect of the intervention on exercise during and after the commitment ended split by member status level

	Non Gold Members (Fixed effects)	Gold Members (Fixed Effects)	Non Gold Members (Robust SE)	Gold Members (Robust SE)
Treatment X During Intervention	0.01 (0.01)	0.02 (0.02)	0.01 (0.02)	0.02 (0.03)
Treatment X After Intervention	0.001 (0.01)	0.003 (0.02)	0.001 (0.03)	0.003 (0.03)
Treatment Condition			-0.04 (0.05)	0.07 (0.05)
During Intervention	-0.07*** (0.01)	-0.07*** (0.01)	-0.07*** (0.02)	-0.07*** (0.02)
After Intervention	-0.01 (0.01)	0.01 (0.01)	-0.01 (0.03)	0.01 (0.03)
Constant	1.15*** (0.005)	1.88*** (0.01)	1.18*** (0.04)	1.84*** (0.04)
Observations	42300	31014	42300	31014
Clusters	2350	1723	2350	1723

Note. The dependent variable is the log number of monthly exercise events. ‘Gold Members’ includes all gold and diamond members as of January 1, 2012.

* $p < .1$; ** $p < .05$; *** $p < .01$

Table A5. The effect of the intervention on long-term customer loyalty measured by change in status

	ATT	ITT	Non Gold Members (ATT)	Gold Members (ATT)
Committed	0.07 (0.12)		-0.02 (0.18)	0.16 (0.13)
Treatment Condition		0.02 (0.03)		
Constant	0.42*** (0.02)	0.40*** (0.05)	0.64*** (0.04)	0.14*** (0.02)
Observations	3969	3969	2267	1702

Note. The dependent variable is the change in status level from the beginning of 2012 to the end of 2013. Status is coded as 1 (blue) to 5 (diamond). Status level was missing for 104 members inactive in 2013, who are excluded from these analyses.

* $p < .1$; ** $p < .05$; *** $p < .01$

Table A6. Intention to treat analyses of the effect of the intervention on loyalty during and after the commitment ended split by member status level

	Non Gold Members (Fixed effects)	Gold Members (Fixed Effects)	Non Gold Members (Robust SE)	Gold Members (Robust SE)
Treatment X During Intervention	0.05 (0.05)	0.08* (0.05)	0.05 (0.05)	0.08 (0.06)
Treatment X After Intervention	-0.02 (0.05)	0.16*** (0.05)	-0.02 (0.08)	0.16** (0.06)
Treatment Condition			0.01 (0.07)	-0.02 (0.05)
During Intervention	-0.59*** (0.04)	-0.64*** (0.04)	-0.59*** (0.04)	-0.64*** (0.05)
After Intervention	-0.35*** (0.04)	-0.24*** (0.04)	-0.35*** (0.06)	-0.24*** (0.05)
Constant	6.75*** (0.02)	8.03*** (0.02)	6.74*** (0.06)	8.04*** (0.04)
Observations	42300	31014	42300	31014
Clusters	2350	1723	2350	1723

Note. The dependent variable is the log monthly number of points. ‘Gold Members’ includes all gold and diamond members as of January 1, 2012.

* $p < .1$; ** $p < .05$; *** $p < .01$

Note. Experimental condition is used as the instrument for commitment status in the analyses. 'Gold Members' includes all gold and diamond members as of January 1, 2012.

* $p < .1$; ** $p < .05$; *** $p < .01$