Supplementary Materials

	Experiment 1		Experiment 2		Experiment 3 – Set 1		Experiment 3 – Set 2	
	Healthy	Unhealthy	Healthy	Unhealthy	Healthy	Unhealthy	Healthy	Unhealthy
Trained	Carrot	Lovehearts[1]	Strawberries	Jelly beans[1]	Carrot	Crisps	Carrot	Crisps
	Rice cakes	Chocolate	Rice cakes	Chocolate	Blueberries	M&Ms[2]	Rice cakes	Chocolate
	Apple	Jelly babies[1]	Apple	Jelly babies	Raspberries	Marshmallow	Apple	Marshmallow
	Banana	Crisps	Banana	Cola bottles[1]	Grapes	Lovehearts	Banana	Cola bottles
			Cucumber	Donut				
			Melon	Fries				
Novel	Celery	Donuts	Orange	Ice cream	Pears	Cake	Raspberry	Jelly babies
	Cucumber	Cupcakes	Cherries	Biscuits	Kiwis	Biscuits	Strawberry	M&Ms
	Orange	Mini-eggs[2]			Pineapple	Cookies	Orange	Donuts
	Pineapple	Biscuits			Raisins	Lollypop	Grapes	Biscuits

Supplementary Table 1: Foods included in the food choice shopping task for each experiment of Study 1.

[1]Lovehearts, jelly babies, jelly beans and cola bottles are all commonly consumed sweets in the UK.

[2]M&Ms and mini-eggs are small chocolate candies commonly consumed in the UK.

	Set 1		Set 2	
	Healthy	Unhealthy	Healthy	Unhealthy
Trained	Red apple	White chocolate	Green apple	Milk chocolate
	Green grapes	Marshmallows (pieces)	Red grapes	Marshmallows (plaits)
	Cucumber	Biscuit	Carrot	Cookie
	Strawberries	Cola bottles[1]	Raspberries	Gummy bears[1]
Novel	Blueberries	M&Ms[2]	Kiwi	Skittles[1]
	Orange	Jam donut	Banana	Ring donut

Supplementary Table 2: Foods included in the food choice shopping task (hypothetical food choice) for each card set of Study 2.

[1]Cola bottles, gummy bears and Skittles are all commonly consumed sweets in the UK.

[2]M&Ms are small chocolate candies commonly consumed in the UK.

Study 1 (Experiments 1 & 2)		Study 1 (Experiment 3)		Study 2	
Healthy	Unhealthy	Healthy	Unhealthy	Healthy	Unhealthy
Apple	Crisps	Apple	Crisps	Red apple	White chocolate
Banana	Cola bottle[1]	Banana	Cola bottle	Green apple	Milk chocolate
Blueberry	Jelly baby[1]	Blueberry	Jelly baby	Carrot	Marshmallow pieces
Carrot	Jelly bean[1]	Carrot	Jelly bean	Cucumber	Marshmallow plaits
Raspberry	Marshmallow	Raspberry	Marshmallow	Strawberry	Cookie
Strawberry	Loveheart[1]	Strawberry	Loveheart	Raspberry	Biscuit
Rice cake	Chocolate buttons	Rice cake	Chocolate buttons	Red grapes	Cola bottle
Tomato	M&M[2]	Grapes	M&M	Green grapes	Gummy bears[1]

Supplementary Table 3: Foods included in the training tasks of each experiment.
[1]*All commonly consumed sweets in the UK.*
[2]*Commonly consumed chocolate candies in the UK.*
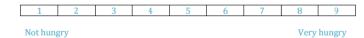
Well done on the game!

We have one last question:

Could you please tell us how hungry do you feel now?

Could you circle the number that best shows how hungry you feel right now

1 meaning you aren't hungry at all

9 saying you feel very hungry

1	2	3	4	5	6	7	8	9

Not hungry   Very hungry

Well done on the game!

We have one last question:

Could you please tell us how hungry do you feel now?

Could you circle the **number** that best shows how hungry you feel right now

0 meaning you feel full (not hungry at all)

10 meaning you feel very hungry

Full	Quite Full		Not hungry or full	Quite Hungry	Very hungry
0	1	2	3	4	5	6	7	8	9	10

Supplementary Figure 1: Hunger scales used in Study 1, Experiment 1 (left) and all other experiments (right)

Sample Number		Active Condition (n = 72)	Control Condition (n = 70)	F/χ^2	p
Overall (all three samples)	Gender Female Male	38 34	36 34	$\chi^2_1 = .026$	.872
	Age	7.76 (1.63)	7.61 (1.73)	$F_{1,139} = .27$	.606
	Hunger	5.14 (3.12)	5.31 (3.19)	$F_{1,140} = .11$	.741
Experiment 1	Gender Female Male	13 14	11 16	$\chi^2_1 = .300$	.584
	Age	8.26 (1.58)	8.15 (1.54)	$F_{1,52} = .07$	.795
	Hunger	6.15 (2.32)	6.11 (2.91)	$F_{1,52} = .00$	.959
Experiment 2	Gender Female Male	11 10	13 9	$\chi^2_1 = .196$	.658
	Age	7.19 (1.91)	7.09 (2.04)	$F_{1,41} = .03$	.870
	Hunger	4.38 (3.77)	4.91 (3.07)	$F_{1,41} = .26$	.617
Experiment 3	Gender Male Female	14 10	12 9	$\chi^2_1 = .007$	.936
	Age	7.70 (1.22)	7.48 (1.47)	$F_{1,43} = .29$	.592
	Hunger	4.67(3.10)	4.71 (3.55)	$F_{1,43} = .00$	.962

Supplementary Table 4: Participant characteristics for each experiment individually and the combined sample of Study 1.