

**Table S1:** Food items, macronutrient composition and weight of food consumed during the high fat/low carbohydrate and low fat/high carbohydrate conditions. Breakfast, dinner and snack box meals were *ad libitum*, while the lunch meals were fixed.

	Food Item	
	HFLC	LFHC
<b>Breakfast</b>		
	Cereal (Kellogg's Corn Flakes)	Cereal (Kellogg's Corn Flakes)
	Full fat milk	Semi skimmed milk
	White bread- toasted (Sainsbury's medium sliced)	White bread- toasted (Sainsbury's thick sliced)
	Scrambled egg (Sainsbury's large, free range eggs and Sainsbury's 70% fat Sunflower margarine)	Scrambled egg (Sainsbury's large, free range eggs)
	Butter (Lurpak spread)	Margarine- Low fat (Flora Light margarine)
	Granulated sugar	Granulated sugar
<b>% CHO</b>	<b>28.8 ± 1.4</b>	<b>52.9 ± 2.0</b>
<b>% Protein</b>	<b>17.6 ± 0.3</b>	<b>17.8 ± 0.7</b>
<b>% Fat</b>	<b>53.6 ± 1.2</b>	<b>29.2 ± 1.3</b>
<b>Weight (g)</b>	<b>372.3 ± 17.8</b>	<b>371.4 ± 15.1</b>
<b>Lunch</b>		
	Cheese Sandwich- bread (Sainsbury's medium sliced white bread), butter (Lurpak spread), cheese (Sainsbury's English Medium Cheddar) and lettuce	Cheese Sandwich- bread (Sainsbury's thick sliced white bread), margarine (Flora Extra Light spread), low fat cheese (Sainsbury's Be Good to Yourself Mature White Cheese) and lettuce
	Crisps (Pringles Original)	Crisps (Pringles Light)
	Caramel short cake (Sainsbury's caramel short cake)	Choc Chip Slice (Sainsbury's)
<b>% CHO</b>	<b>33.6 ± 0.1</b>	<b>62.6 ± 0.4</b>
<b>% Protein</b>	<b>11.9 ± 0.0</b>	<b>13.1 ± 0.1</b>
<b>% Fat</b>	<b>54.5 ± 0.2</b>	<b>24.3 ± 0.5</b>
<b>Weight (g)</b>	<b>456.4 ± 1.0</b>	<b>451.6 ± 1.0</b>
<b>Dinner</b>		
	High Fat Pizza	Low Fat Pizza
	Garlic bread (Safeway Garlic bread slices)	French bread and margarine (Flora Extra Light spread)

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	Coleslaw (Sainsbury's Coleslaw salad)	Lettuce, Tomato and cucumber
	Chocolate biscuits (Penguin)	Malt loaf (Soreen malt loaf)
	Shortbread fingers (Sainsbury's all butter highland shortbread fingers)	Swiss roll (Sainsbury's Raspberry Swiss Roll)
	Crisps (Walkers ready salted)	Apple
<b>% CHO</b>	<b>30.7 ± 0.3</b>	<b>67.3 ± 0.5</b>
<b>% Protein</b>	<b>13.8 ± 0.3</b>	<b>13.3 ± 0.2</b>
<b>% Fat</b>	<b>55.5 ± 0.3</b>	<b>19.4 ± 0.2</b>
<b>Weight (g)</b>	<b>443.6 ± 17.5</b>	<b>536.9 ± 24.6</b>
<b>Snack Box</b>	Jacobs TUC biscuits	McVities jaffa cakes
	Cookies (Sainsbury's choc chunk & hazelnut)	Garibaldi biscuits (Sainsbury's)
	Flapjack (Sainsbury's all butter flapjack)	Jelly babies (Bassett's)
	Chocolate (Cadbury's fruit & nut mil)k	Bananas
	Salted peanuts (Sainsbury's jumbo)	
<b>% CHO</b>	<b>32.0 ± 1.7</b>	<b>81.7 ± 0.8</b>
<b>% Protein</b>	<b>10.0 ± 0.7</b>	<b>5.6 ± 0.1</b>
<b>% Fat</b>	<b>58.3 ± 1.2</b>	<b>12.5 ± 0.8</b>
<b>Weight (g)</b>	<b>142.7 ± 18.4</b>	<b>219.3 ± 21.1</b>

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