

**Supplementary Table and Figures** to the manuscript “Temporal Trends in Maternal Perceived Food Intake Frequencies and Associations with Gestational Diabetes: the Cambridge Baby Growth Study” by Petry et al.

**Table S1.** Statistically significant associations between the food/drink intake frequency ranks and week 28 HOMA S, HOMA B, the insulin disposition index and OGTT 0 and 60 min. glucose concentrations in the CBGS. All food types in the food frequency questionnaire that are not shown did not have a significant association with any of these values (Benjamini-Hochberg adjusted  $p > 0.05$ ).

food/drink type	HOMA S		HOMA B		Insulin disposition index		OGTT fasting glucose concentration		OGTT 60 min. glucose concentration	
	slope	p-value	slope	p-value	slope	p-value	slope	p-value	slope	p-value
spirits	-3.73x 10 <sup>-2</sup>	5.04x 10 <sup>-38</sup>	1.12x 10 <sup>-2</sup>	3.12x 10 <sup>-3</sup>	7.97	3.13x 10 <sup>-12</sup>	0	9.21x 10 <sup>-4</sup>	3.26x 10 <sup>-4</sup>	2.04x 10 <sup>-2</sup>
cola	-4.19x 10 <sup>-2</sup>	1.81x 10 <sup>-36</sup>	2.05x 10 <sup>-2</sup>	1.44x 10 <sup>-19</sup>	-1.24	1.84x 10 <sup>-3</sup>	0	3.43x 10 <sup>-3</sup>	1.96x 10 <sup>-4</sup>	5.08x 10 <sup>-2</sup>
fresh fish with salad pasta	3.07x 10 <sup>-2</sup>	3.38x 10 <sup>-33</sup>	-1.60x 10 <sup>-2</sup>	9.43x 10 <sup>-17</sup>	1.86	3.90x 10 <sup>-9</sup>	0	0.40	-2.49x 10 <sup>-4</sup>	1.80x 10 <sup>-3</sup>

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fish	2.15x 10 <sup>-2</sup>	3.53x 10 <sup>-33</sup>	-1.49x 10 <sup>-2</sup>	2.80x 10 <sup>-22</sup>	1.54	0.74	0	0.74	-2.31x 10 <sup>-4</sup>	3.94x 10 <sup>-3</sup>
pulses	2.15x 10 <sup>-2</sup>	1.18x 10 <sup>-32</sup>	-2.07x 10 <sup>-2</sup>	1.32x 10 <sup>-43</sup>	-0.90	2.95x 10 <sup>-2</sup>	0	1.61x 10 <sup>-12</sup>	0	5.21x 10 <sup>-2</sup>
dried fruit	2.80x 10 <sup>-2</sup>	7.12x 10 <sup>-24</sup>	-1.71x 10 <sup>-2</sup>	1.26x 10 <sup>-20</sup>	1.30	3.88x 10 <sup>-3</sup>	0	3.46x 10 <sup>-8</sup>	-5.07x 10 <sup>-4</sup>	2.70x 10 <sup>-11</sup>
bean curd	1.48x 10 <sup>-4</sup>	9.75x 10 <sup>-22</sup>	-2.29x 10 <sup>-2</sup>	3.33x 10 <sup>-34</sup>	-0.96	6.13x 10 <sup>-05</sup>	2.85x 10 <sup>-4</sup>	3.31x 10 <sup>-15</sup>	-3.22x 10 <sup>-4</sup>	1.27x 10 <sup>-5</sup>
canned fish	1.91x 10 <sup>-2</sup>	4.67x 10 <sup>-21</sup>	-8.04x 10 <sup>-3</sup>	3.16x 10 <sup>-6</sup>	1.66	3.47x 10 <sup>-11</sup>	0	2.49x 10 <sup>-2</sup>	-1.87x 10 <sup>-4</sup>	0.14
wine	3.22x 10 <sup>-2</sup>	3.90x 10 <sup>-18</sup>	-2.12x 10 <sup>-2</sup>	6.63x 10 <sup>-23</sup>	1.52	5.69x 10 <sup>-3</sup>	0	5.61x 10 <sup>-2</sup>	-2.40x 10 <sup>-4</sup>	1.04x 10 <sup>-2</sup>
fresh fish as main	2.91x 10 <sup>-2</sup>	1.48x 10 <sup>-17</sup>	-1.44x 10 <sup>-2</sup>	4.41x 10 <sup>-16</sup>	1.24	6.26x 10 <sup>-2</sup>	0	0.58	-2.25x 10 <sup>-4</sup>	1.28x 10 <sup>-2</sup>

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fresh green vegetables	2.30x 10 <sup>-2</sup>	2.15x 10 <sup>-14</sup>	-1.26x 10 <sup>-2</sup>	8.48x 10 <sup>-9</sup>	1.21	5.19x 10 <sup>-3</sup>	0	0.77	-1.18x 10 <sup>-4</sup>	0.13
other canned beans*	2.33x 10 <sup>-2</sup>	3.57x 10 <sup>-13</sup>	-2.16x 10 <sup>-2</sup>	3.47x 10 <sup>-22</sup>	0.20	0.15	1.83x 10 <sup>-4</sup>	1.32x 10 <sup>-9</sup>	0	5.79x 10 <sup>-2</sup>
yogurt	1.06x 10 <sup>-2</sup>	1.95x 10 <sup>-12</sup>	-1.33x 10 <sup>-2</sup>	1.33x 10 <sup>-21</sup>	1.62	5.84x 10 <sup>-9</sup>	0	1.17x 10 <sup>-2</sup>	0	0.29
fresh fish with bread	2.68x 10 <sup>-2</sup>	2.56x 10 <sup>-11</sup>	-1.11x 10 <sup>-2</sup>	1.80x 10 <sup>-6</sup>	0.84	0.70	0	0.18	0	0.88
meat	1.01x 10 <sup>-2</sup>	3.65x 10 <sup>-11</sup>	-1.42x 10 <sup>-3</sup>	0.92	1.35	1.57x 10 <sup>-9</sup>	0	1.09x 10 <sup>-2</sup>	0	4.23x 10 <sup>-3</sup>
fresh fruit	2.20x 10 <sup>-2</sup>	4.41x 10 <sup>-11</sup>	-8.35x 10 <sup>-3</sup>	1.06x 10 <sup>-5</sup>	1.03	4.74x 10 <sup>-2</sup>	0	0.83	0	0.38
other fresh vegetables**	2.15x 10 <sup>-2</sup>	1.03x 10 <sup>-10</sup>	-1.14x 10 <sup>-2</sup>	1.42x 10 <sup>-8</sup>	0.34	0.13	0	0.19	1.24x 10 <sup>-4</sup>	0.17

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organic food	1.91x 10 <sup>-2</sup>	1.11x 10 <sup>-10</sup>	-1.56x 10 <sup>-2</sup>	5.48x 10 <sup>-26</sup>	-1.23	2.59x 10 <sup>-3</sup>	0	5.03x 10 <sup>-3</sup>	-2.55x 10 <sup>-4</sup>	8.82x 10 <sup>-2</sup>
liver	2.29x 10 <sup>-2</sup>	2.27x 10 <sup>-10</sup>	-1.55x 10 <sup>-2</sup>	9.74x 10 <sup>-20</sup>	2.43	0.72	1.57x 10 <sup>-4</sup>	3.31x 10 <sup>-18</sup>	3.14x 10 <sup>-4</sup>	2.38x 10 <sup>-3</sup>
tap water	1.97x 10 <sup>-2</sup>	1.64x 10 <sup>-9</sup>	-1.02x 10 <sup>-2</sup>	5.11x 10 <sup>-6</sup>	-7.74x 10 <sup>-2</sup>	0.71	0	4.85x 10 <sup>-3</sup>	1.64x 10 <sup>-3</sup>	2.33x 10 <sup>-2</sup>
tinned vegetables	1.87x 10 <sup>-2</sup>	1.15x 10 <sup>-7</sup>	-4.96x 10 <sup>-4</sup>	3.16x 10 <sup>-3</sup>	0.11	0.99	0	4.40x 10 <sup>-2</sup>	0	0.96
soft cheese	1.74x 10 <sup>-2</sup>	6.07x 10 <sup>-7</sup>	-1.18x 10 <sup>-2</sup>	1.64x 10 <sup>-9</sup>	-7.04x 10 <sup>-2</sup>	0.15	0	0.80	0	0.32
hard cheese	9.38x 10 <sup>-3</sup>	1.08x 10 <sup>-6</sup>	-7.53x 10 <sup>-3</sup>	1.16x 10 <sup>-7</sup>	1.24	0.30	-1.98x 10 <sup>-4</sup>	2.53x 10 <sup>-7</sup>	0	6.63x 10 <sup>-2</sup>
baked beans	-6.47x 10 <sup>-3</sup>	4.71x 10 <sup>-6</sup>	1.68x 10 <sup>-3</sup>	0.23	-0.96	5.90x 10 <sup>-5</sup>	0	0.96	3.81x 10 <sup>-4</sup>	1.10x 10 <sup>-3</sup>

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eggs	4.34x 10 <sup>-3</sup>	6.89x 10 <sup>-6</sup>	-1.87x 10 <sup>-4</sup>	4.13x 10 <sup>-2</sup>	0.42	1.17x 10 <sup>-3</sup>	-9.80x 10 <sup>-5</sup>	5.14x 10 <sup>-6</sup>	-3.74x 10 <sup>-4</sup>	1.77x 10 <sup>-8</sup>
chocolate	-1.64x 10 <sup>-4</sup>	1.51x 10 <sup>-5</sup>	0.02	8.57x 10 <sup>-6</sup>	-3.29	2.38x 10 <sup>-2</sup>	0	0.67	0	0.03
white fish	2.02x 10 <sup>-2</sup>	6.56x 10 <sup>-5</sup>	-7.74x 10 <sup>-3</sup>	1.78x 10 <sup>-6</sup>	1.29	8.42x 10 <sup>-2</sup>	0	5.31x 10 <sup>-2</sup>	0	0.30
frozen vegetables	-9.48x 10 <sup>-3</sup>	1.46x 10 <sup>-4</sup>	8.91x 10 <sup>-3</sup>	6.68x 10 <sup>-6</sup>	0.34	0.59	0	2.91x 10 <sup>-2</sup>	2.29x 10 <sup>-4</sup>	1.29x 10 <sup>-2</sup>
tinned fruit	-9.46x 10 <sup>-3</sup>	3.56x 10 <sup>-4</sup>	1.29x 10 <sup>-2</sup>	2.17x 10 <sup>-11</sup>	-0.55	0.12	-1.16x 10 <sup>-4</sup>	2.05x 10 <sup>-6</sup>	1.79x 10 <sup>-4</sup>	0.32
salad	1.69x 10 <sup>-2</sup>	1.90x 10 <sup>-3</sup>	-7.23x 10 <sup>-3</sup>	1.62x 10 <sup>-5</sup>	-0.45	1.29x 10 <sup>-3</sup>	0	0.86	1.36x 10 <sup>-4</sup>	4.88x 10 <sup>-2</sup>
organic others***	-2.41x 10 <sup>-2</sup>	6.27x 10 <sup>-3</sup>	1.86x 10 <sup>-2</sup>	1.29x 10 <sup>-2</sup>	-1.83	0.32	0	0.19	-8.69x 10 <sup>-4</sup>	1.39x 10 <sup>-2</sup>

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organic fruit/ vegetables	-1.57x 10 <sup>-2</sup>	1.20x 10 <sup>-2</sup>	7.97x 10 <sup>-3</sup>	9.39x 10 <sup>-2</sup>	-1.12x 10 <sup>-2</sup>	0.74	0	0.30	-4.60x 10 <sup>-4</sup>	3.16x 10 <sup>-3</sup>
cocoa	-3.04x 10 <sup>-3</sup>	1.31x 10 <sup>-2</sup>	5.74x 10 <sup>-3</sup>	0.19	0.75	0.24	0	7.81x 10 <sup>-3</sup>	1.59x 10 <sup>-4</sup>	0.16
beer	9.64x 10 <sup>-3</sup>	3.45x 10 <sup>-2</sup>	-1.07x 10 <sup>-2</sup>	1.54x 10 <sup>-8</sup>	0.83	0.18	0	0.93	-3.23x 10 <sup>-4</sup>	3.87x 10 <sup>-6</sup>
tea	-7.51x 10 <sup>-4</sup>	0.67	-2.19x 10 <sup>-3</sup>	0.66	2.04	2.28x 10 <sup>-7</sup>	0	0.91	-4.62x 10 <sup>-4</sup>	6.05x 10 <sup>-8</sup>
soya	3.11x 10 <sup>-3</sup>	0.24	-2.11x 10 <sup>-4</sup>	0.07	-1.43	2.63x 10 <sup>-4</sup>	0	4.81x 10 <sup>-2</sup>	-1.41x 10 <sup>-4</sup>	0.30
poultry	0	0.11	2.17x 10 <sup>-3</sup>	2.06x 10 <sup>-5</sup>	0.13	6.82x 10 <sup>-4</sup>	0	6.45x 10 <sup>-3</sup>	2.07x 10 <sup>-4</sup>	1.09x 10 <sup>-10</sup>
organic dairy	1.47x 10 <sup>-3</sup>	0.71	-3.52x 10 <sup>-3</sup>	4.55x 10 <sup>-2</sup>	-2.85	7.45x 10 <sup>-3</sup>	0	3.79x 10 <sup>-3</sup>	-3.31x 10 <sup>-4</sup>	0.04

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shellfish	3.07x 10 <sup>-3</sup>	0.79	-4.04x 10 <sup>-3</sup>	4.74x 10 <sup>-2</sup>	-0.24	2.84x 10 <sup>-2</sup>	1.62x 10 <sup>-4</sup>	7.94x 10 <sup>-10</sup>	3.23x 10 <sup>-4</sup>	4.07x 10 <sup>-4</sup>
organic meat	9.82x 10 <sup>-3</sup>	7.05x 10 <sup>-2</sup>	0	0.85	-0.61	0.63	0	9.98x 10 <sup>-3</sup>	-7.50x 10 <sup>-4</sup>	1.63x 10 <sup>-5</sup>
organic bread	-5.68x 10 <sup>-4</sup>	0.88	7.98x 10 <sup>-3</sup>	1.41x 10 <sup>-2</sup>	0.72	0.14	0	0.23	-8.52x 10 <sup>-4</sup>	1.41x 10 <sup>-5</sup>

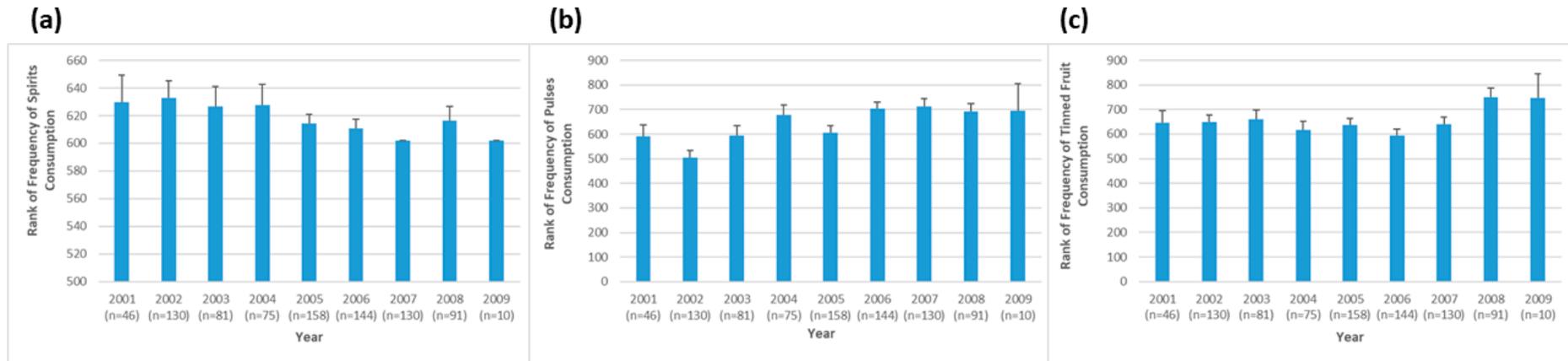
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\*Other canned beans or pulses – not baked beans.

\*\*Other fresh vegetables – not green vegetables, e.g. turnip, swede, carrots, onions

\*\*\*Other organic – organic or home grown food

**Figure S1.** Bar charts showing the mean (S.E.M.) frequency ranks for the consumption of (a) spirits ( $p\text{-trend}=2.1\times 10^{-2}$ ), (b) pulses ( $p\text{-trend}=1.4\times 10^{-24}$ ) and (c) tinned fruit ( $p\text{-trend}=2.3\times 10^{-5}$ ), all shown per year in which the 75 g OGTT was performed in the Cambridge Baby Growth Study.



**Figure S2.** Scree plot of the first ten principal components (dimensions) of maternal food intake frequency ranks in pregnancy in the Cambridge Baby Growth Study.

