Supplement 3

Figure S3.1: Amount of liquid diet (µl) consumed for males, females on each of the four diets ranging in their protein-to-carbohydrate ratios (P:C), A = 1:1, B = 1:2, C = 1:4, D = 1:16.
**Figure S3.2:** Amount of liquid diet consumed (µl) for males, females and all 30 genotypes on each of the four diets ranging in their protein-to-carbohydrate ratios (P:C), A = 1:1, B = 1:2, C = 1:4, D = 1:16.
Figure S3.3: Amount of protein and carbohydrate consumed (mg) across all four nutritional rails.
Figure S3.4: Comparison of our study with Jensen et al. (2015). Panel A shows our data compared with the overall consumption, whereas panel B breaks up the Jensen et al. (2015) data into the six different protein-to-carbohydrate ratios (colour-coded) and four diet concentrations (numbered).
Table S3.1: The full model of effect of sex and diet category on liquid diet consumption. Model includes both fixed and random effects.

**Fixed effects:**

<table>
<thead>
<tr>
<th>Term</th>
<th>F</th>
<th>Df</th>
<th>Df.res</th>
<th>Pr(&gt;F)</th>
</tr>
</thead>
<tbody>
<tr>
<td>(Intercept)</td>
<td>228.072</td>
<td>1</td>
<td>3.48</td>
<td>&lt; 0.001</td>
</tr>
<tr>
<td>Diet</td>
<td>265.14</td>
<td>3</td>
<td>80.76</td>
<td>&lt; 0.001</td>
</tr>
<tr>
<td>Sex</td>
<td>138.359</td>
<td>1</td>
<td>186.09</td>
<td>&lt; 0.001</td>
</tr>
<tr>
<td>Diet × Sex</td>
<td>9.224</td>
<td>3</td>
<td>2050.78</td>
<td>&lt; 0.001</td>
</tr>
</tbody>
</table>

**Random effects:**

<table>
<thead>
<tr>
<th>Groups</th>
<th>Name</th>
<th>Variance</th>
<th>Std.Dev.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hemiclone</td>
<td>(Intercept)</td>
<td>0.47115</td>
<td>0.6864</td>
</tr>
<tr>
<td></td>
<td>DietB</td>
<td>0.02484</td>
<td>0.1576</td>
</tr>
<tr>
<td></td>
<td>DietC</td>
<td>0.05755</td>
<td>0.2399</td>
</tr>
<tr>
<td></td>
<td>DietD</td>
<td>0.09222</td>
<td>0.3037</td>
</tr>
<tr>
<td></td>
<td>SexM</td>
<td>0.29725</td>
<td>0.5452</td>
</tr>
<tr>
<td>Block</td>
<td>(Intercept)</td>
<td>2.31982</td>
<td>1.5231</td>
</tr>
<tr>
<td>Residual</td>
<td></td>
<td>5.14898</td>
<td>2.2691</td>
</tr>
</tbody>
</table>