Supplement 3

Figure S3.1: Amount of liquid diet (μ l) 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.

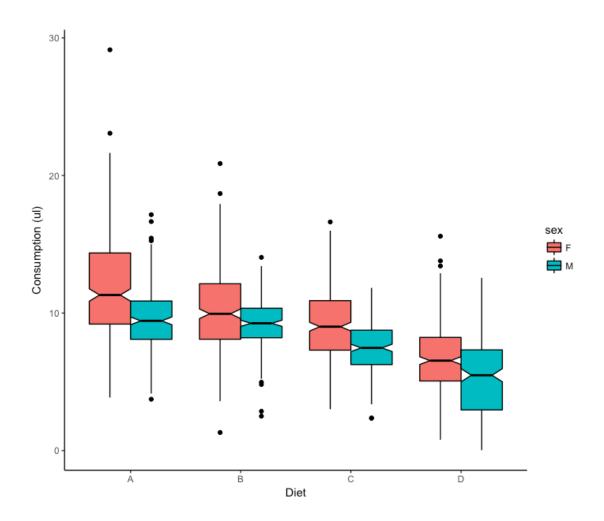


Figure S3.2: Amount of liquid diet consumed (μ l) for males, females and all 30 genotypes on each of the four diets ranging in their protein-to-carbohydrate ratios (P:C), A = 1:1, B = 1:2, C = 1:4, D = 1:16.

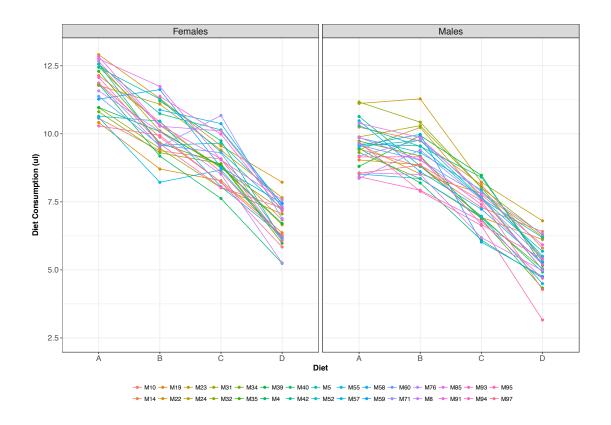


Figure S3.3: Amount of protein and carbohydrate consumed (mg) across all four nutritional rails.

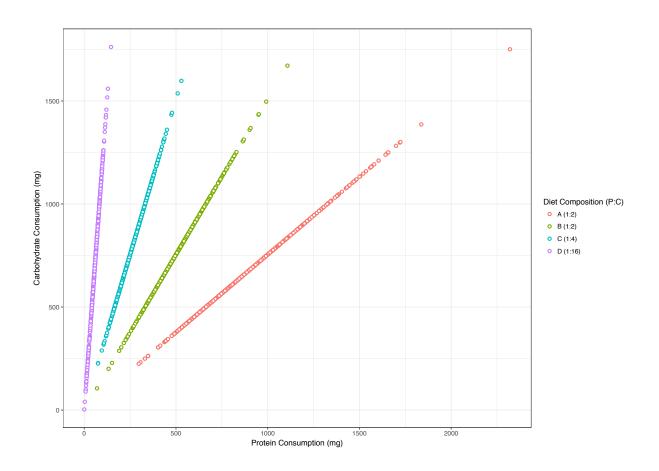


Figure S3.4: Comparison of our study with Jensen et al. (2015). Panel A shows our data compared with the overall consumption, whereas panel B breaks up the Jensen et al. (2015) data into the six different protein-to-carbohydrate ratios (colour-coded) and four diet concentrations (numbered).

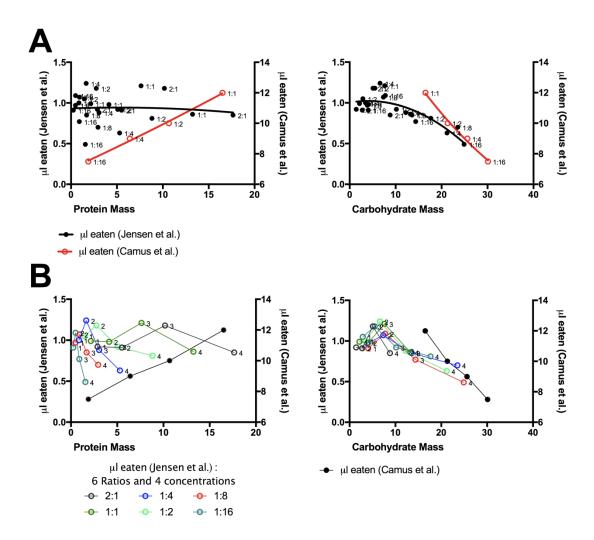


Table S3.1: The full model of effect of sex and diet category on liquid diet consumption. Model includes both fixed and random effects.

Fixed effects:

Term	F	Df	Df.res	Pr(>F)
(Intercept)	228.072	1	3.48	< 0.001
Diet	265.14	3	80.76	< 0.001
Sex	138.359	1	186.09	< 0.001
$Diet \times Sex$	9.224	3	2050.78	< 0.001

Random effects:

Groups	Name	Variance	Std.Dev.
Hemiclone	(Intercept)	0.47115	0.6864
	DietB	0.02484	0.1576
	DietC	0.05755	0.2399
	DietD	0.09222	0.3037
	SexM	0.29725	0.5452
Block	(Intercept)	2.31982	1.5231
Residual		5.14898	2.2691