

Table S1a F value (P-value) from ANOVA determining which experimental factors (row) predict each phenotype columns

Factor	Glucose	Protein	Triglyceride	Glycerol	Glycogen	Wet weight
<i>Wolbachia</i> status	1.36 (0.24)	6.25 (0.013)	0.01 (0.92)	0.58 (0.45)	0.35 (0.56)	1.11 (0.29)
Diet	29.86 (<0.0001)	4.06 (0.044)	0.25 (0.62)	18.42 (<0.0001)	0.56 (0.45)	50.24 (<0.0001)
Line(<i>Wolbachia</i>)	1.74 (<0.0001)	1.39 (0.004)	1.38 (0.0049)	2.30 (<0.0001)	3.61 (<0.0001)	7.47 (<0.0001)
Diet x Line(<i>Wolb</i>)	1.16 (0.12)	0.81 (0.94)	1.03 (0.41)	1.05 (0.35)	1.04 (0.36)	1.33 (0.012)
Block(Diet)	9.47 (<0.0001)	8.60 (<0.0001)	5.04 (<0.0001)	31.52 (<0.0001)	15.65 (<0.0001)	16.35 (<0.0001)

Table S1b Effect of genetic line in determining traits on each diet: Z-values (P-values).

Diet	Glucose	Protein	Triglyceride	Glycerol	Glycogen	Wet weight
Low glucose	1.44 (0.0041)	0.97 (0.56)	1.35 (0.017)	1.65 (0.0001)	2.21 (<0.0001)	4.08 (<0.0001)
High glucose	1.46 (0.0038)	1.26 (0.051)	0.99 (0.53)	1.68 (0.0001)	2.48 (<0.0001)	4.96 (<0.0001)