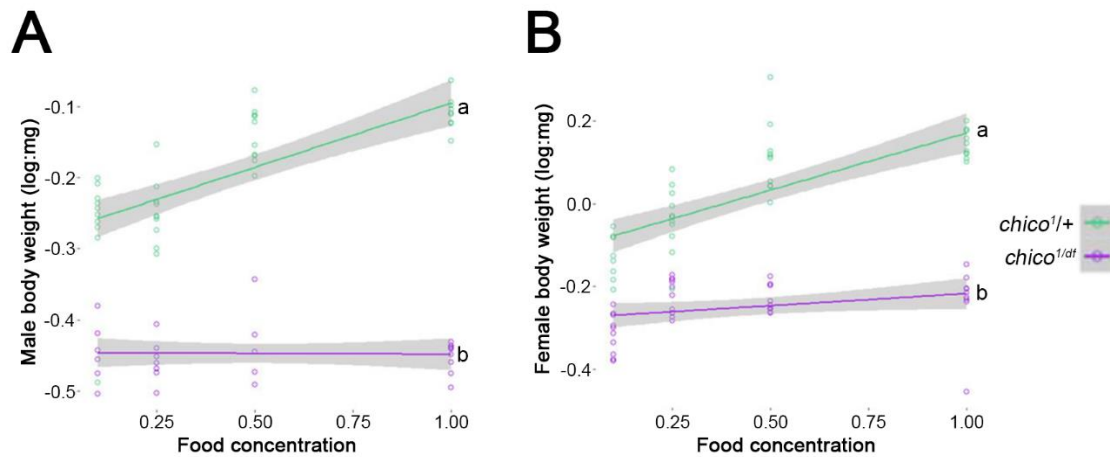


**Figure S1. Torso-like mutants have reduced food intake**

*ts1<sup>Δ</sup>* larvae consume significantly less food over a 1 h time period compared to heterozygous controls ( $P = 0.0040$ ).  $n = 5-6$  groups of 10 individuals for all means. Error bars represent  $\pm 1$  SEM and genotypes sharing the same letter indicate that they are statistically indistinguishable from one another ( $P < 0.05$ , ANOVA and pairwise  $t$  tests). The data used to generate each graph can be found in Supplementary data file 1.



**Figure S2. *chico* mutants display reduced nutritional plasticity for body size**

The variation of both male (A) and female (B) adult body weight over different food concentrations is significantly smaller for *chico*<sup>1/dt</sup> animals compared to heterozygous controls (*chico*<sup>1/+</sup>). Male and female body weights were log<sub>10</sub> transformed and fit with linear models using food concentration and genotype as fixed effects. Regression lines that differ significantly in their slopes, indicating differences in nutritional plasticity for body size between genotypes, are marked with different letters. n = 5-10 groups of at least 3 individuals for each food type. The data used to generate each graph can be found in Supplementary data file 1.