

Fig. S1. Pooled means of the control ( $F_{\text{Pooled}}$ ) and starvation-selected ( $S_{\text{Pooled}}$ ) populations for each trait displayed in the primary text. Data shown include: survivorship and mass (row 1); development time (row 2); metabolic rate (row 3); Food consumption (row 4); adult sleep (row 5); and larval sleep (row 6). Stars indicate instances where the two-way ANOVA model referenced in the primary text reached significance. \* =  $P < 0.05$ ; \*\* =  $P < 0.01$ ; \*\*\* =  $P < 0.001$ ; \*\*\*\* =  $P < 0.0001$ . Error bars represent +/- standard deviation from mean.

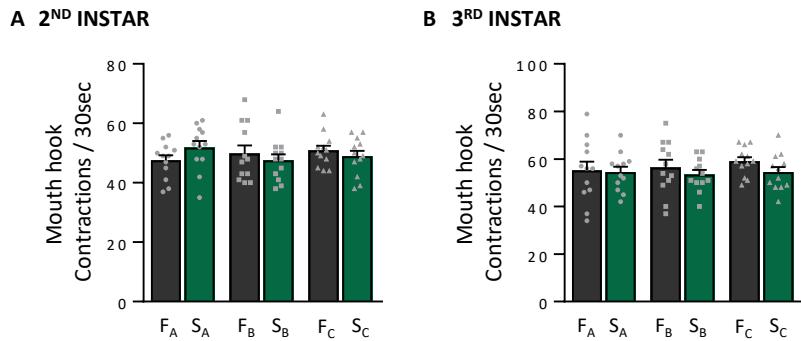


Fig. S2. Increased food consumption in starvation resistant larvae is not a result of changes in feeding rate. There is no difference in the number of mouth hook contractions taken during a 30 sec period in either (A) 2<sup>nd</sup> instar larvae (two-way ANOVA:  $F_{1,66} = 0.0003$ ,  $P=0.9870$ ,  $N = 12$  per population) or (B) 3<sup>rd</sup> instar larvae (two-way ANOVA:  $F_{1,66} = 1.569$ ,  $P=0.2148$ ,  $N = 12$  per population). Error bars represent +/- standard deviation from mean.