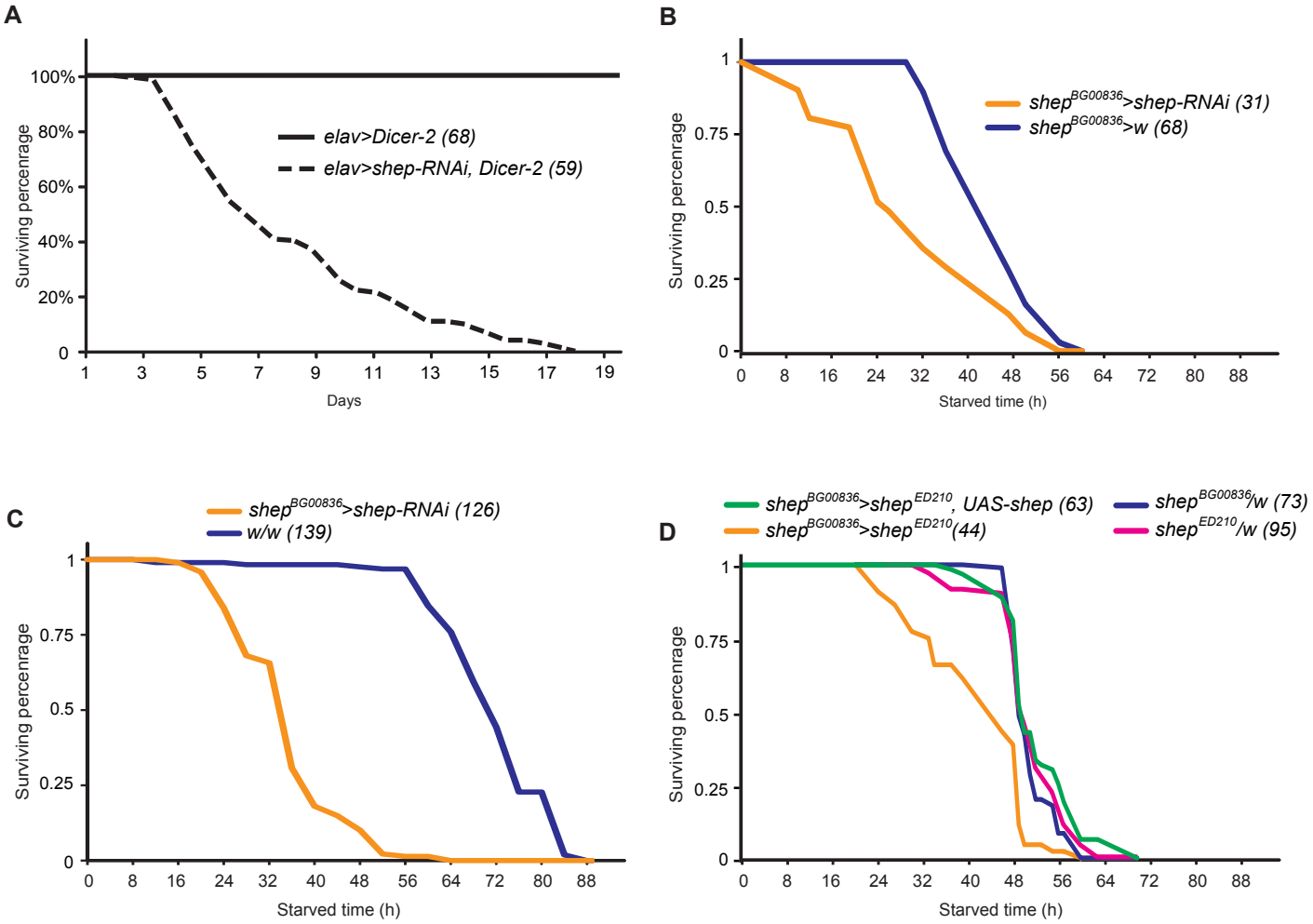

Figure S8 Loss of *shep* resulted in reduced life span. (A) Pan-neuronal *shep* RNAi led to shorter life span. The running percentage of surviving adults was plotted for *elav>shep-RNAi, Dicer-2* and *elav>Dicer-2* adult flies on regular food. (B-D) Reduced starvation resistance was detected in multiple *shep* mutants. Cumulative survival under starvation conditions was calculated (see methods) for $shep^{BG00836}$ *>shep-RNAi,* $shep^{BG00836}$ homozygotes, $shep^{BG00836}/shep^{ED210}$ mutants, and $shep^{BG00836}/shep^{ED210}$*, UAS-shep* rescue flies. In each panel, the *shep* loss-of-function genotype is labeled in orange. The results for *shep* heterozygotes are shown in blue and magenta, and the results for flies rescued with *UAS-shep* are shown in green. Sample sizes are listed in parentheses following each genotype.