

SUPPLEMENTAL FIGURE LEGENDS

Figure S1. BD increases the survival of proteotoxicity models. The life spans of the indicated strains were significantly extended on BD relative to control fed conditions. **(A)** Q₃₅YFP animals ($p=1.1 \times 10^{-7}$) **(B)** A β_{42} animals ($p=8.7 \times 10^{-4}$).

Figure S2. Suppression of proteotoxicity by BD is not correlated with reduced aggregate formation or reduced Q₃₅YFP protein. Aggregates were visualized in 14 day old Q₃₅YFP animals by fluorescence microscopy and quantified as described in the Experimental Procedures. **(A)** Control fed animals. **(B)** BD animals. **(C)** Immunoblot analysis of total protein lysates from control fed or BD animals. Equal total protein was loaded per lane and probed with anti-GFP (see Materials and Methods). The * marks a band of unknown identity specific to the Q₃₅YFP animals. The # marks a doublet running at the predicted size of the Q₃₅YFP transgene.

Figure S3. BD suppresses amyloid beta toxicity by a mechanism that is independent of IIS and dependent on *hsf-1*. **(A)** RNAi inhibition of *daf-16* significantly accelerates paralysis in A β_{42} animals relative to growth on empty vector (EV) bacteria in control fed (CF) animals ($p=2.6 \times 10^{-7}$), but does not prevent suppression of paralysis by BD ($p=1.7 \times 10^{-10}$). **(B)** RNAi inhibition of *daf-2* significantly reduces paralysis in A β_{42} animals relative to growth on EV bacteria ($p=5.3 \times 10^{-4}$). BD further reduces paralysis of *daf-2* RNAi treated animals ($p=2.4 \times 10^{-8}$).

Table S1. Life span data for supplemental figure 1A

Table S2. Life span data for supplemental figure 1B

Table S3. Life span data for figure 5B

Table S4. Life span data for figure 5C

Supplemental Movie Files:

Movie 1: Shows an 8 day old paralyzed control fed Q₃₅YFP animal.

Movie 2: Shows an 8 day old BD Q₃₅YFP animal.

Movie 3: Shows a 12 day old paralyzed control fed Q₃₅YFP animal visualized by fluorescence microscopy.

Movie 4: Shows a 12 day old BD Q₃₅YFP animal visualized by fluorescence microscopy.

Movie 5: Shows a 12 day old paralyzed control fed Q₃₅YFP animal thrashing in a drop of M9 liquid media.

Movie 6: Shows a 12 day old BD Q₃₅YFP animal thrashing in a drop of M9 liquid media.

Movie 7. Shows a 4 day old unc-52(e444) control fed animal paralyzed on a solid NGM surface

Movie 8. Shows a 4 day old unc-52(e444) BD animal paralyzed on a solid NGM surface