

Supplementary Material

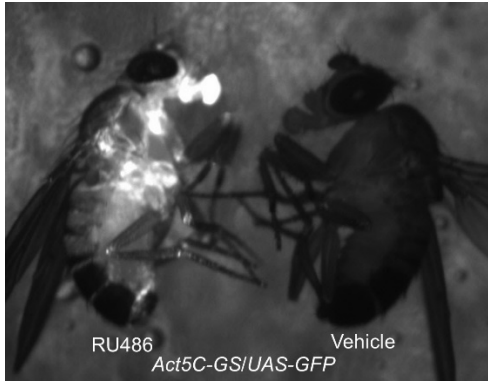
Supplementary Table 1. Summary of survival statistics.

| Genotype | Sex | Diet | N (flies) | | | Median lifespan (d) | | | Fisher's exact test | Log-rank |
|---------------------------------------|---------|------|---------------------|-----------------|--------|---------------------|-------|-------------------------------|------------------------------|------------------------------|
| | | | Yeast extract (w/v) | Vehicle | RU486* | Vehicle | RU486 | Difference | <i>p</i> | <i>p</i> |
| <i>Act5C-GS/UAS-GFP</i> (Figure 1) | M | 0.1% | 59 | 60 | 77 | 66 | -14% | 1.1 × 10⁻⁵ | 3.9 × 10⁻⁹ | |
| | M | 0.5% | 59 | 56 | 70 | 63 | -10% | 0.016 | 0.054 | |
| | M | 5% | 59 | 58 | 49 | 49 | 0% | 0.85 | 0.59 | |
| <i>Act5C-GS/+</i> | M | 0.1% | 60 | 60 | 56 | 52 | -7% | 0.010 | 0.013 | |
| | M | 0.5% | 60 | 59 | 52 | 49 | -6% | 0.028 | 0.0010 | |
| | M | 5% | 60 | 60 | 45 | 45 | 0% | 0.69 | 0.47 | |
| Canton-S | M | 0.1% | 60 | 58 | 63 | 56 | -11% | 5.5 × 10⁻⁶ | 5.7 × 10⁻⁷ | |
| | M | 0.5% | 60 | 60 | 56 | 52 | -7% | 1.0 | 0.57 | |
| | M | 5% | 60 | 60 | 45 | 49 | 9% | 0.00020 | 5.6 × 10⁻⁶ | |
| Dahomey | M | 0.1% | 58 | 61 | 38 | 31 | -18% | 1.2 × 10⁻¹¹ | <10⁻¹⁰ | |
| | M | 0.5% | 59 | 60 | 42 | 38 | -10% | 0.0042 | 0.0021 | |
| | M | 5% | 59 | 60 | 31 | 35 | 13% | 1.0 | 0.46 | |
| Dahomey (Figure 2) | Trial 2 | M | 0.1% | 60 | 59 | 45 | 38 | -16% | 0.0013 | 0.00030 |
| | Trial 3 | M | 0.1% | 61 | 59 | 49 | 39 | -20% | 3.5 × 10⁻⁸ | 1.4 × 10⁻⁶ |
| | Trial 4 | M | 0.1% | 60 | 58 | 42 | 35 | -17% | 1.5 × 10⁻⁶ | 9.1 × 10⁻⁶ |
| Axenic Dahomey | M | 0.1% | 60 | 60 | 31 | 24 | -23% | 2.1 × 10⁻⁸ | <10⁻¹⁰ | |
| | M | 0.5% | 60 | 57 | 45 | 42 | -7% | 1.0 | 0.25 | |
| | M | 5% | 60 | 59 | 38 | 42 | 11% | 0.0059 | 0.039 | |
| Dahomey (Figure 3) | F | 0.1% | 59 | 59 [†] | 63 | 56 | -11% | 0.097 | 0.079 | |
| | F | 0.1% | | 61 [‡] | | 42 | -33% | 0.00020 | 0.00040 | |
| | F | 5% | 61 | 61 [†] | 63 | 63 | 0% | 0.72 | 0.39 | |
| Canton-S | F | 5% | | 58 [‡] | | 66 | 5% | 0.20 | 0.40 | |
| | F | 0.1% | 62 | 58 [†] | 63 | 59 | -6% | 1.0 | 0.36 | |
| | F | 0.1% | | 59 [‡] | | 59 | -6% | 0.0032 | 0.00020 | |
| | F | 5% | 59 | 61 [†] | 49 | 49 | 0% | 0.26 | 0.16 | |
| | F | 5% | | 58 [‡] | | 49 | 0% | 0.0029 | 0.021 | |
| Canton-S | M | 0.1% | 55 | 58 [†] | 52 | 45 | -13% | 0.023 | 0.0092 | |
| | M | 0.1% | | 58 [‡] | | 31 | -40% | 3.5 × 10⁻¹¹ | <10⁻¹⁰ | |
| Dahomey (Supp. Figure 2) | M | 5% | 57 | 60 [‡] | 38 | 38 | 0% | 1.0 | 0.50 | |

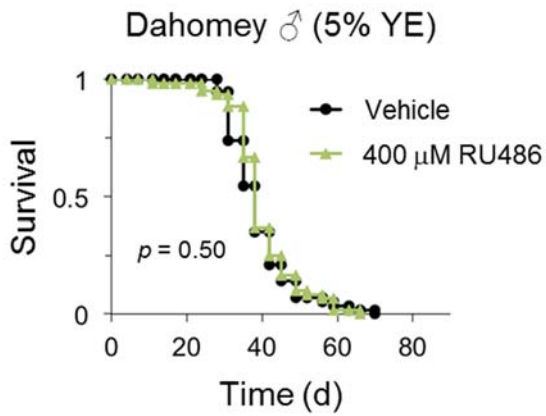
*Unless otherwise noted, RU486 was supplemented at 200 μM.

[†]100 μM RU486.

[‡]400 μM RU486.



Supplementary Figure 1. Representative GFP fluorescence in *Act5C-GS/UAS-GFP* flies fed food supplemented with 200 μ M RU486 (left) or vehicle control (right).



Supplementary Figure 2. Survival of Dahomey males on 5% YE diet supplemented with 400 μ M RU486 or vehicle. Log-rank p value between survival curves is shown. $N = 57$ (vehicle) or 60 (RU486) flies per condition. See Supplementary Table 1 for statistics. YE, yeast extract.