

Supplementary Information for

Exercise preserves fitness capacity during aging through AMPK and mitochondrial dynamics

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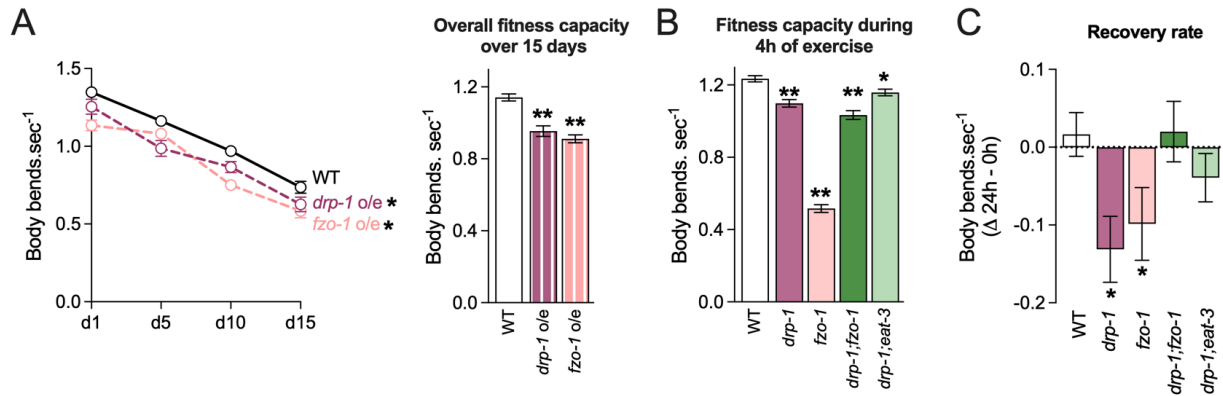


Fig. S1. Impaired mitochondrial fission or fusion compromises fitness capacity (related to Fig. 2). (A) Fitness capacity decay and overall fitness capacity (average of d1, d5, d10 and d15) of worms overexpressing mitochondrial dynamics genes *drp-1 o/e* and *fzo-1 o/e* with aging. (B) Fitness capacity during 4h of exercise and (C) recovery rate of WT and mitochondrial dynamics mutants *drp-1(tm1108)*, *fzo-1(tm1133)*, *drp-1(tm1108);fzo-1(tm1133)* and *drp-1(tm1108);eat-3(ad426)* submitted to acute exercise on day 1 of adulthood. Data are presented as mean \pm SEM. *p < 0.05 and **p < 0.001 vs. WT. Detailed statistical analyses, number of biological replicates and sample size are described in *SI Appendix*, Table S1.

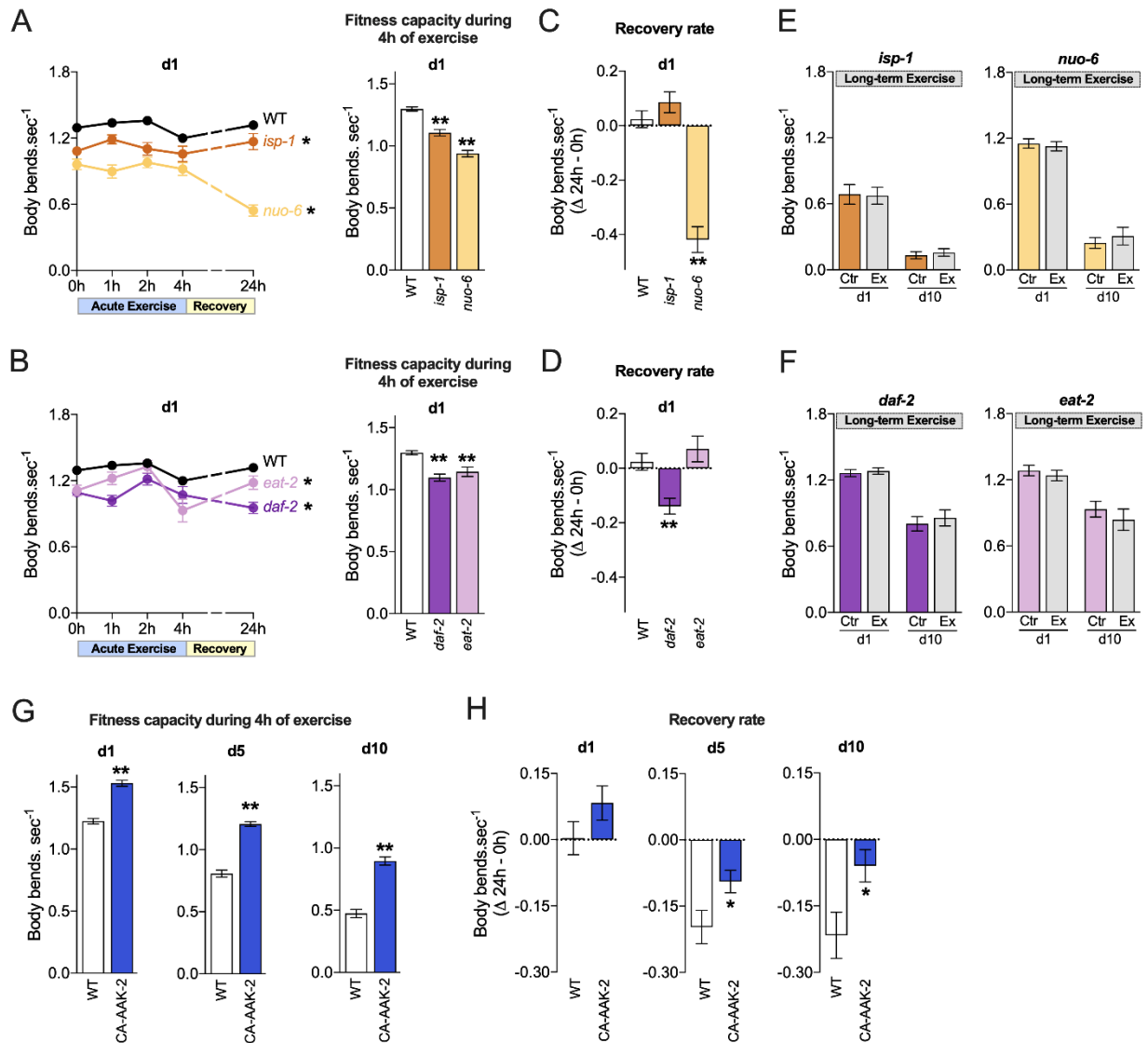


Fig. S2. Long-lived mutants *isp-1*, *nuo-6*, *daf-2* and *eat-2* have decreased fitness capacity and exhibit no beneficial effects of exercise (related to Fig. 3). (A, B) Fitness capacity during 4h of exercise and (C, D) recovery rate of WT, *isp-1(qm150)*, *nuo-6(qm200)*, *daf-2(e1370)* and *eat-2(ad1116)* worms submitted to acute exercise on day 1 of adulthood. (E, F) Fitness capacity of *isp-1(qm150)*, *nuo-6(qm200)*, *daf-2(e1370)* and *eat-2(ad1116)* worms submitted to long-term exercise. (G) Fitness capacity over 4h of exercise and (H) recovery rate of WT and CA-AAK-2 worms submitted to acute exercise on days 1, 5 and 10 of adulthood. Data are presented as mean \pm SEM. *p < 0.05 and **p < 0.001 vs. WT. Detailed statistical analyses, number of biological replicates and sample size are described in *SI Appendix*, Table S1.

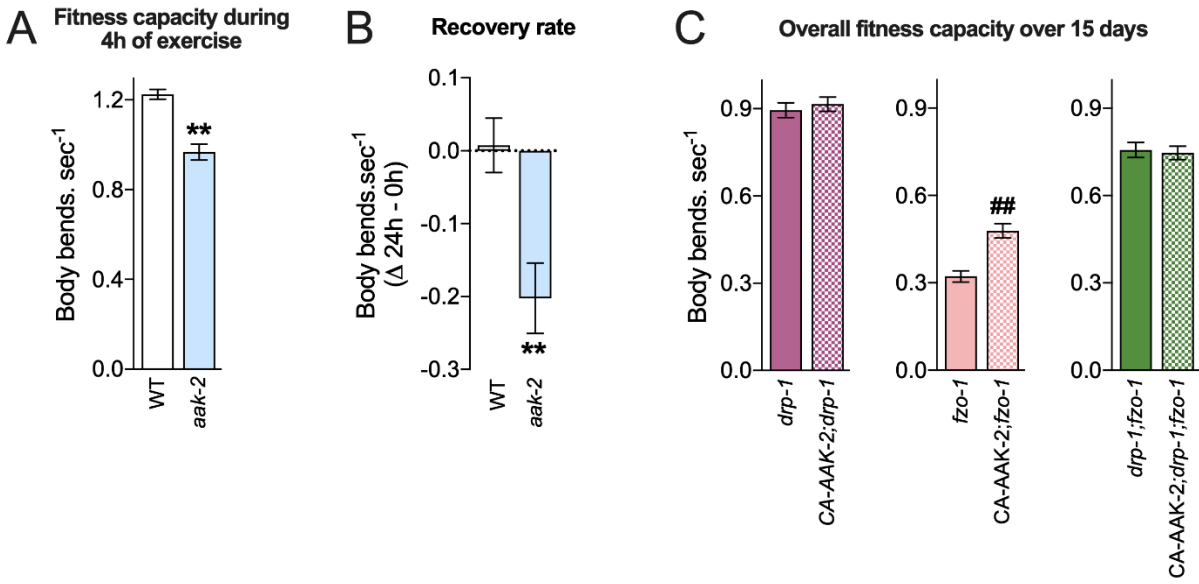


Fig. S3. AMPK is required for exercise-induced benefits (related to Fig. 4). (A) Fitness capacity during 4h of exercise and (B) recovery rate of WT and *aak-2(gt33)* worms submitted to acute exercise on day 1 of adulthood. (C) Overall fitness capacity (average of d1, d5, d10 and d15) of mitochondrial dynamics mutants *drp-1(tm1108)*, *fzo-1(tm1133)* and *drp-1(tm1108);fzo-1(tm1133)* in the absence or presence of CA-AAK-2 with aging. Data are presented as mean \pm SEM. ** $p < 0.001$ vs. WT and ## $p < 0.001$ vs. *fzo-1(tm1133)*. Detailed statistical analyses, number of biological replicates and sample size are described in *SI Appendix*, Table S1.

Table S1. Biological replicates, sample size and statistical analyses.

Figure (Replicates)	Strain - Group	Sample size	Statistical analyses	p value
1A (3)	zcls14[myo-3::GFP(mito)] - d1	56		
	zcls14[myo-3::GFP(mito)] - d5	67	two-tailed Student's t vs. d1	<.0001
	zcls14[myo-3::GFP(mito)] - d10	66	two-tailed Student's t vs. d1	<.0001
	zcls14[myo-3::GFP(mito)] - d15	45	two-tailed Student's t vs. d1	<.0001
1B (3)	zcls14[myo-3::GFP(mito)] - d1	126		
	zcls14[myo-3::GFP(mito)] - d5	173	chi-square vs. d1	<.0001
	zcls14[myo-3::GFP(mito)] - d10	151	chi-square vs. d1	<.0001
1D (3)	zcls14[myo-3::GFP(mito)] - d1 0h	126		
	zcls14[myo-3::GFP(mito)] - d1 1h Exercise	138	chi-square vs. d1 0h	<.0001
	zcls14[myo-3::GFP(mito)] - d1 2h Exercise	149	chi-square vs. d1 0h	<.0001
	zcls14[myo-3::GFP(mito)] - d1 4h Exercise	173	chi-square vs. d1 0h	<.0001
	zcls14[myo-3::GFP(mito)] - d1 24h Recovery	150	chi-square vs. d1 0h chi-square vs. d1 4h	0.0001 <.0001
1D (3)	zcls14[myo-3::GFP(mito)] - d5 0h	156		
	zcls14[myo-3::GFP(mito)] - d5 1h Exercise	159	chi-square vs. d5 0h	0.3565

	zcls14[myo-3::GFP(mito)] - d5 2h Exercise	165	chi-square vs. d5 0h	0.0009
	zcls14[myo-3::GFP(mito)] - d5 4h Exercise	154	chi-square vs. d5 0h	<.0001
	zcls14[myo-3::GFP(mito)] - d5 24h Recovery	156	chi-square vs. d5 0h	0.6592
			chi-square vs. d5 4h	<.0001
1D (2)	zcls14[myo-3::GFP(mito)] - d10 0h	135		
	zcls14[myo-3::GFP(mito)] - d10 1h Exercise	74	chi-square vs. d10 0h	0.8980
	zcls14[myo-3::GFP(mito)] - d10 2h Exercise	83	chi-square vs. d10 0h	0.9652
	zcls14[myo-3::GFP(mito)] - d10 4h Exercise	86	chi-square vs. d10 0h	0.2928
	zcls14[myo-3::GFP(mito)] - d10 24h Recovery	75	chi-square vs. d10 0h	0.1979
chi-square vs. d10 4h			0.0135	
1E (3)	zcls14[myo-3::GFP(mito)] - d1 0h	56		
	zcls14[myo-3::GFP(mito)] - d1 1h Exercise	55	two-tailed Student's t vs. d1 0h	0.1744
	zcls14[myo-3::GFP(mito)] - d1 2h Exercise	53	two-tailed Student's t vs. d1 0h	0.2839
	zcls14[myo-3::GFP(mito)] - d1 4h Exercise	56	two-tailed Student's t vs. d1 0h	0.0004
	zcls14[myo-3::GFP(mito)] - d1 24h Recovery	37	two-tailed Student's t vs. d1 0h	0.7309
two-tailed Student's t vs. d1 4h			0.0010	
1E (3)	zcls14[myo-3::GFP(mito)] - d5 0h	67		
	zcls14[myo-3::GFP(mito)] - d5 1h Exercise	65	two-tailed Student's t vs. d5 0h	0.2880
	zcls14[myo-3::GFP(mito)] - d5 2h Exercise	69	two-tailed Student's t vs. d5 0h	0.0062
	zcls14[myo-3::GFP(mito)] - d5 4h Exercise	70	two-tailed Student's t vs. d5 0h	<.0001
	zcls14[myo-3::GFP(mito)] - d5 24h Recovery	64	two-tailed Student's t vs. d5 0h	0.0444
two-tailed Student's t vs. d5 4h			0.0002	
1E (3)	zcls14[myo-3::GFP(mito)] - d10 0h	66		
	zcls14[myo-3::GFP(mito)] - d10 1h Exercise	66	two-tailed Student's t vs. d10 0h	0.0932
	zcls14[myo-3::GFP(mito)] - d10 2h Exercise	68	two-tailed Student's t vs. d10 0h	<.0001
	zcls14[myo-3::GFP(mito)] - d10 4h Exercise	70	two-tailed Student's t vs. d10 0h	<.0001
	zcls14[myo-3::GFP(mito)] - d10 24h Recovery	59	two-tailed Student's t vs. d10 0h	0.0372
two-tailed Student's t vs. d10 4h			<.0001	
1F (3)	zcls14[myo-3::GFP(mito)] - d1 Recovery rate (24h - 0h)	56		
	zcls14[myo-3::GFP(mito)] - d5 Recovery rate (24h - 0h)	67	two-tailed Student's t vs d1	0.0073
	zcls14[myo-3::GFP(mito)] - d10 Recovery rate (24h - 0h)	65	two-tailed Student's t vs d1	0.0050
1G (3)	zcls14[myo-3::GFP(mito)] - d1 0h, 1hEx, 2hEx, 4hEx, 24hRec	5 (257)	Linear Regression	<.0001
	zcls14[myo-3::GFP(mito)] - d5 0h, 1hEx, 2hEx, 4hEx, 24hRec	5 (335)		
	zcls14[myo-3::GFP(mito)] - d10 0h, 1hEx, 2hEx, 4hEx, 24hRec	5 (329)		
2B (3)	N2 - d1, d5, d10, d15	67, 63, 54, 49		
	<i>drp-1(tm1108)</i> - d1, d5, d10, d15	42, 48, 46, 48	two-tailed Student's t vs. N2	0.0019
	<i>fzo-1(tm1133)</i> - d1, d5, d10, d15	42, 42, 39, 44	two-tailed Student's t vs. N2	0.0015
	<i>drp-1(tm1108);fzo-1(tm1133)</i> - d1, d5, d10, d15	69, 70, 70, 65	two-tailed Student's t vs. N2	0.0036
	<i>drp-1(tm1108);eat-3(ad426)</i> - d1, d5, d10, d15	54, 48, 61, 57	two-tailed Student's t vs. N2	0.0017
2B (3)	N2 - Overall capacity (d1+d5+d10+d15)	233		
	<i>drp-1(tm1108)</i> - Overall capacity (d1+d5+d10+d15)	184	two-tailed Student's t vs. N2	<.0001
	<i>fzo-1(tm1133)</i> - Overall capacity (d1+d5+d10+d15)	167	two-tailed Student's t vs. N2	<.0001
	<i>drp-1(tm1108);fzo-1(tm1133)</i> - Overall capacity (d1+d5+d10+d15)	274	two-tailed Student's t vs. N2	<.0001

	<i>drp-1(tm1108);eat-3(ad426)</i> - Overall capacity (d1+d5+d10+d15)	220	two-tailed Student's t vs. N2	<.0001
2C (3)	N2 - d1 0h, 1h Ex, 2h Ex, 4h Ex, 24h Rec	56, 55, 53, 56, 37		
	<i>drp-1(tm1108)</i> - d1 0h, 1hEx, 2hEx, 4hEx, 24hRec	56, 64, 64, 66, 62	two-tailed Student's t vs. N2 d1	0.0149
	<i>fzo-1(tm1133)</i> - d1 0h, 1hEx, 2hEx, 4hEx, 24hRec	51, 61, 61, 64, 51	two-tailed Student's t vs. N2 d1	<.0001
	<i>drp-1(tm1108);fzo-1(tm1133)</i> - d1 0h, 1hEx, 2hEx, 4hEx, 24hRec	61, 65, 66, 69, 62	two-tailed Student's t vs. N2 d1	0.0145
	<i>drp-1(tm1108);eat-3(ad426)</i> - d1 0h, 1hEx, 2hEx, 4hEx, 24hRec	64, 65, 66, 64, 58	two-tailed Student's t vs. N2 d1	0.0388
2E (3)	zcls14[myo-3::GFP(mito)] - Control d1	67		
	zcls14[myo-3::GFP(mito)] - Exercise d1	68	two-tailed Student's t vs. Control d1	0.6006
	zcls14[myo-3::GFP(mito)] - Control d5	63		
	zcls14[myo-3::GFP(mito)] - Exercise d5	44	two-tailed Student's t vs. Control d5	0.1348
	zcls14[myo-3::GFP(mito)] - Control d10	54		
	zcls14[myo-3::GFP(mito)] - Exercise d10	65	two-tailed Student's t vs. Control d10	0.0004
	zcls14[myo-3::GFP(mito)] - Control d15	49		
	zcls14[myo-3::GFP(mito)] - Exercise d15	59	two-tailed Student's t vs. Control d15	<.0001
2F (3)	zcls14[myo-3::GFP(mito)] - Control d5	173		
	zcls14[myo-3::GFP(mito)] - Exercise d5	147	chi-square vs. Control d5	0.0449
	zcls14[myo-3::GFP(mito)] - Control d10	151		
	zcls14[myo-3::GFP(mito)] - Exercise d10	130	chi-square vs. Control d10	0.0168
2G (3)	zcls14[myo-3::GFP(mito)] - Control d5, d10	2 (117)		
	zcls14[myo-3::GFP(mito)] - Exercise d5, d10	2 (109)		
2H (3)	<i>drp-1(tm1108)</i> - Control d1	52		
	<i>drp-1(tm1108)</i> - Exercise d1	53	two-tailed Student's t vs. Control d1	0.9518
	<i>drp-1(tm1108)</i> - Control d5	48		
	<i>drp-1(tm1108)</i> - Exercise d5	43	two-tailed Student's t vs. Control d5	0.0502
	<i>drp-1(tm1108)</i> - Control d10	46		
	<i>drp-1(tm1108)</i> - Exercise d10	43	two-tailed Student's t vs. Control d10	0.4028
	<i>drp-1(tm1108)</i> - Control d15	48		
	<i>drp-1(tm1108)</i> - Exercise d15	48	two-tailed Student's t vs. Control d15	0.4557
2H (3)	<i>fzo-1(tm1133)</i> - Control d1	52		
	<i>fzo-1(tm1133)</i> - Exercise d1	52	two-tailed Student's t vs. Control d1	0.3720
	<i>fzo-1(tm1133)</i> - Control d5	42		
	<i>fzo-1(tm1133)</i> - Exercise d5	43	two-tailed Student's t vs. Control d5	0.3977
	<i>fzo-1(tm1133)</i> - Control d10	39		
	<i>fzo-1(tm1133)</i> - Exercise d10	40	two-tailed Student's t vs. Control d10	0.9599
	<i>fzo-1(tm1133)</i> - Control d15	44		
	<i>fzo-1(tm1133)</i> - Exercise d15	35	two-tailed Student's t vs. Control d15	0.0752
2H (3)	<i>drp-1(tm1108);fzo-1(tm1133)</i> - Control d1	69		
	<i>drp-1(tm1108);fzo-1(tm1133)</i> - Exercise d1	69	two-tailed Student's t vs. Control d1	0.9146
	<i>drp-1(tm1108);fzo-1(tm1133)</i> - Control d5	70		
	<i>drp-1(tm1108);fzo-1(tm1133)</i> - Exercise d5	65	two-tailed Student's t vs. Control d5	0.0699
	<i>drp-1(tm1108);fzo-1(tm1133)</i> - Control d10	70		
	<i>drp-1(tm1108);fzo-1(tm1133)</i> - Exercise d10	63	two-tailed Student's t vs. Control d10	0.0462
	<i>drp-1(tm1108);fzo-1(tm1133)</i> - Control d15	65		

	<i>drp-1(tm1108);fzo-1(tm1133)</i> - Exercise d15	75	two-tailed Student's t vs. Control d15	0.0600
2H (3)	<i>drp-1(tm1108);eat-3(ad426)</i> - Control d1	54		
	<i>drp-1(tm1108);eat-3(ad426)</i> - Exercise d1	55	two-tailed Student's t vs. Control d1	0.5846
	<i>drp-1(tm1108);eat-3(ad426)</i> - Control d5	48		
	<i>drp-1(tm1108);eat-3(ad426)</i> - Exercise d5	64	two-tailed Student's t vs. Control d5	0.1322
	<i>drp-1(tm1108);eat-3(ad426)</i> - Control d10	61		
	<i>drp-1(tm1108);eat-3(ad426)</i> - Exercise d10	68	two-tailed Student's t vs. Control d10	0.0085
	<i>drp-1(tm1108);eat-3(ad426)</i> - Control d15	57		
	<i>drp-1(tm1108);eat-3(ad426)</i> - Exercise d15	82	two-tailed Student's t vs. Control d15	0.0115
2I (2)	<i>sid-1(qt-9);uths237;EV(RNAi)</i> - Control d1	24		
	<i>sid-1(qt-9);uths237;EV(RNAi)</i> - Exercise d1	24	two-tailed Student's t vs. Control d1	0.6546
	<i>sid-1(qt-9);uths237;EV(RNAi)</i> - Control d10	24		
	<i>sid-1(qt-9);uths237;EV(RNAi)</i> - Exercise d10	24	two-tailed Student's t vs. Control d10	0.0063
2I (2)	<i>sid-1(qt-9);uths237;drp-1(RNAi)</i> - Control d1	21		
	<i>sid-1(qt-9);uths237;drp-1(RNAi)</i> - Exercise d1	24	two-tailed Student's t vs. Control d1	0.2646
	<i>sid-1(qt-9);uths237;drp-1(RNAi)</i> - Control d10	20		
	<i>sid-1(qt-9);uths237;drp-1(RNAi)</i> - Exercise d10	24	two-tailed Student's t vs. Control d10	0.2871
2I (2)	<i>sid-1(qt-9);uths237;fzo-1(RNAi)</i> - Control d1	17		
	<i>sid-1(qt-9);uths237;fzo-1(RNAi)</i> - Exercise d1	24	two-tailed Student's t vs. Control d1	0.8048
	<i>sid-1(qt-9);uths237;fzo-1(RNAi)</i> - Control d10	24		
	<i>sid-1(qt-9);uths237;fzo-1(RNAi)</i> - Exercise d10	24	two-tailed Student's t vs. Control d10	0.5977
2I (2)	<i>sid-1(qt-9);uths237;eat-3(RNAi)</i> - Control d1	24		
	<i>sid-1(qt-9);uths237;eat-3(RNAi)</i> - Exercise d1	24	two-tailed Student's t vs. Control d1	0.2244
	<i>sid-1(qt-9);uths237;eat-3(RNAi)</i> - Control d10	24		
	<i>sid-1(qt-9);uths237;eat-3(RNAi)</i> - Exercise d10	24	two-tailed Student's t vs. Control d10	0.4201
3A (2)	N2 - d1	47		
	<i>isp-1(qm150)</i> - d1	43	two-tailed Student's t vs. N2 d1	<.0001
	<i>nuo-6(qm200)</i> - d1	61	two-tailed Student's t vs. N2 d1	<.0001
	<i>daf-2(e1370)</i> - d1	57	two-tailed Student's t vs. N2 d1	0.0004
	<i>eat-2(ad1116)</i> - d1	48	two-tailed Student's t vs. N2 d1	0.0043
3A (2)	N2 - d10	42		
	<i>isp-1(qm150)</i> - d10	33	two-tailed Student's t vs. N2 d10	<.0001
	<i>nuo-6(qm200)</i> - d10	33	two-tailed Student's t vs. N2 d10	<.0001
	<i>daf-2(e1370)</i> - d10	34	two-tailed Student's t vs. N2 d10	0.0032
	<i>eat-2(ad1116)</i> - d10	31	two-tailed Student's t vs. N2 d10	0.5281
3B (2)	N2 - d1, d5, d10, d15	38, 41, 42, 37		
	CA-AAK-2 - d1, d5, d10, d15	49, 37, 47, 50	two-tailed Student's t vs. N2	0.0261
3B (2)	N2 - Overall capacity (d1+d5+d10+d15)	158		
	CA-AAK-2 - Overall capacity (d1+d5+d10+d15)	183	two-tailed Student's t vs. N2	<.0001
3C (2)	N2 - d1 0h, 1hEx, 2hEx, 4hEx, 24hRec	38, 37, 36, 38, 37		
	CA-AAK-2 - d1 0h, 1hEx, 2hEx, 4hEx, 24hRec	40, 39, 40, 40, 45	two-tailed Student's t vs. N2 d1	0.0094
3C (2)	N2 - d5 0h, 1hEx, 2hEx, 4hEx, 24hRec	45, 44, 47, 46, 42		
	CA-AAK-2 - d5 0h, 1hEx, 2hEx, 4hEx, 24hRec	45, 45, 44, 45, 47	two-tailed Student's t vs. N2 d5	0.0013
3C	N2 - d10 0h, 1hEx, 2hEx, 4hEx, 24hRec	44, 41, 44, 45, 36		

(2)	CA-AAK-2 - d10 0h, 1hEx, 2hEx, 4hEx, 24hRec	44, 45, 46, 45, 43	two-tailed Student's t vs. N2 d10	0.0005
3D (2)	CA-AAK-2 - Control d1	49		
	CA-AAK-2 - Exercise d1	40	two-tailed Student's t vs. Control d1	0.7949
	CA-AAK-2 - Control d5	37		
	CA-AAK-2 - Exercise d5	47	two-tailed Student's t vs. Control d5	<.0001
	CA-AAK-2 - Control d10	47		
	CA-AAK-2 - Exercise d10	40	two-tailed Student's t vs. Control d10	<.0001
	CA-AAK-2 - Control d15	50		
	CA-AAK-2 - Exercise d15	50	two-tailed Student's t vs. Control d15	0.0079
4A (2)	N2 - d1, d5, d10, d15	47, 41, 42, 37		
	<i>aak-2(gt33)</i> -- d1, d5, d10, d15	45, 52, 44, 29	two-tailed Student's t vs. N2	0.0951
4A (2)	N2 - Overall capacity (d1+d5+d10+d15)	167		
	<i>aak-2(gt33)</i> - Overall capacity (d1+d5+d10+d15)	170	two-tailed Student's t vs. N2	0.0010
4B (2)	N2 - d1 0h, 1hEx, 2hEx, 4hEx, 24hRec	38, 37, 36, 38, 40		
	<i>aak-2(gt33)</i> - d1 0h, 1hEx, 2hEx, 4hEx, 24hRec	38, 39, 39, 38, 45	two-tailed Student's t vs. N2 d1	0.0035
4C (2)	<i>aak-2(gt33)</i> - Control d1	45		
	<i>aak-2(gt33)</i> - Exercise d1	45	two-tailed Student's t vs. Control d1	0.9269
	<i>aak-2(gt33)</i> - Control d5	52		
	<i>aak-2(gt33)</i> - Exercise d5	41	two-tailed Student's t vs. Control d5	0.6691
	<i>aak-2(gt33)</i> - Control d10	44		
	<i>aak-2(gt33)</i> - Exercise d10	39	two-tailed Student's t vs. Control d10	0.0003
	<i>aak-2(gt33)</i> - Control d15	29		
	<i>aak-2(gt33)</i> - Exercise d15	44	two-tailed Student's t vs. Control d15	<.0001
4D (3)	N2 - d1, d5, d10, d15	62, 61, 56, 61		
	CA-AAK-2 - d1, d5, d10, d15	63, 84, 69, 71	two-tailed Student's t vs. N2	0.0463
	CA-AAK-2; <i>drp-1(tm1108)</i> - d1, d5, d10, d15	70, 90, 68, 69	two-tailed Student's t vs. N2	0.2522
	CA-AAK-2; <i>fzo-1(tm1103)</i> - d1, d5, d10, d15	82, 72, 66, 65	two-tailed Student's t vs. CA-AAK-2	0.0486
	CA-AAK-2; <i>fzo-1(tm1103)</i> - d1, d5, d10, d15	82, 72, 66, 65	two-tailed Student's t vs. N2	0.0204
	CA-AAK-2; <i>fzo-1(tm1103)</i> - d1, d5, d10, d15	82, 72, 66, 65	two-tailed Student's t vs. CA-AAK-2	0.0023
	CA-AAK-2; <i>drp-1(tm1108);fzo-1(tm1133)</i> - d1, d5, d10, d15	57, 60, 60, 60	two-tailed Student's t vs. N2	0.0322
CA-AAK-2; <i>drp-1(tm1108);fzo-1(tm1133)</i> - d1, d5, d10, d15	57, 60, 60, 60	two-tailed Student's t vs. CA-AAK-2	<.0001	
4D (3)	N2 - Overall capacity (d1+d5+d10+d15)	240		
	CA-AAK-2 - Overall capacity (d1+d5+d10+d15)	287	two-tailed Student's t vs. N2	<.0001
	CA-AAK-2; <i>drp-1(tm1108)</i> - Overall capacity (d1+d5+d10+d15)	297	two-tailed Student's t vs. N2	0.0992
	CA-AAK-2; <i>drp-1(tm1108)</i> - Overall capacity (d1+d5+d10+d15)	297	two-tailed Student's t vs. CA-AAK-2	<.0001
	CA-AAK-2; <i>fzo-1(tm1103)</i> - Overall capacity (d1+d5+d10+d15)	285	two-tailed Student's t vs. N2	<.0001
	CA-AAK-2; <i>fzo-1(tm1103)</i> - Overall capacity (d1+d5+d10+d15)	285	two-tailed Student's t vs. CA-AAK-2	<.0001
4E (3)	CA-AAK-2; <i>drp-1(tm1108);fzo-1(tm1133)</i> - Overall capacity (d1+d5+d10+d15)	237	two-tailed Student's t vs. N2	<.0001
	CA-AAK-2; <i>drp-1(tm1108);fzo-1(tm1133)</i> - Overall capacity (d1+d5+d10+d15)	237	two-tailed Student's t vs. CA-AAK-2	<.0001
4E (3)	<i>drp-1(tm1108)</i> - d1, d5, d10, d15	56, 68, 64, 41		
	CA-AAK-2; <i>drp-1(tm1108)</i> - d1, d5, d10, d15	64, 62, 66, 69	two-tailed Student's t vs. <i>drp-1</i>	0.1506
4E (3)	<i>fzo-1(tm1133)</i> - d1, d5, d10, d15	51, 57, 52, 50		
	CA-AAK-2; <i>fzo-1(tm1133)</i> - d1, d5, d10, d15	67, 72, 66, 65	two-tailed Student's t vs. <i>fzo-1</i>	0.2512
4E	<i>drp-1(tm1108);fzo-1(tm1133)</i> - d1, d5, d10, d15	61, 70, 56, 65		

(3)	CA-AAK-2; <i>drp-1(tm1108);fzo-1(tm1133)</i> - d1, d5, d10, d15	57, 60, 60, 60	two-tailed Student's t vs. <i>drp-1;fzo-1</i>	0.9715
S1A (2-3)	N2 - d1, d5, d10, d15	81, 43, 68, 48		
	<i>drp-1 o/e</i> - d1, d5, d10, d15	39, 39, 40, 29	two-tailed Student's t vs. N2	0.0075
	<i>fzo-1 o/e</i> - d1, d5, d10, d15	64, 61, 66, 43	two-tailed Student's t vs. N2	0.0142
S1A (2-3)	N2 - Overall capacity (d1+d5+d10+d15)	240		
	<i>drp-1 o/e</i> - Overall capacity (d1+d5+d10+d15)	147	two-tailed Student's t vs. N2	<.0001
	<i>fzo-1 o/e</i> - Overall capacity (d1+d5+d10+d15)	234	two-tailed Student's t vs. N2	<.0001
S1B (3)	N2 - Fitness capacity d1 (0h+ 1hEx+ 2hEx+ 4hEx)	220		
	<i>drp-1(tm1108)</i> - Fitness capacity d1 (0h+ 1hEx+ 2hEx+ 4hEx)	250	two-tailed Student's t vs. N2 d1	<.0001
	<i>fzo-1(tm1133)</i> - Fitness capacity d1 (0h+ 1hEx+ 2hEx+ 4hEx)	237	two-tailed Student's t vs. N2 d1	<.0001
	<i>drp-1(tm1108);fzo-1(tm1133)</i> - Fitness capacity d1 (0h+ 1hEx+ 2hEx+ 4hEx)	261	two-tailed Student's t vs. N2 d1	<.0001
	<i>drp-1(tm1108);eat-3(ad426)</i> - Fitness capacity d1 (0h+ 1hEx+ 2hEx+ 4hEx)	259	two-tailed Student's t vs. N2 d1	0.0027
S1C (3)	N2 - d1 Recovery rate (24h - 0h)	56		
	<i>drp-1(tm1108)</i> - d1 Recovery rate (24h - 0h)	56	two-tailed Student's t vs. N2 d1	0.0046
	<i>fzo-1(tm1133)</i> - d1 Recovery rate (24h - 0h)	52	two-tailed Student's t vs. N2 d1	0.0470
	<i>drp-1(tm1108);fzo-1(tm1133)</i> - d1 Recovery rate (24h - 0h)	61	two-tailed Student's t vs. N2 d1	0.9375
	<i>drp-1(tm1108);eat-3(ad426)</i> - d1 Recovery rate (24h - 0h)	65	two-tailed Student's t vs. N2 d1	0.1933
S2A (2)	N2 - d1 0h, 1hEx, 2hEx, 4hEx, 24hRec	37, 50, 50, 51, 42		
	<i>isp-1(qm150)</i> - d1 0h, 1hEx, 2hEx, 4hEx, 24hRec	48, 47, 49, 49, 46	two-tailed Student's t vs. N2 d1	0.0013
	<i>nuo-6(qm200)</i> - d1 0h, 1hEx, 2hEx, 4hEx, 24hRec	44, 44, 43, 45, 51	two-tailed Student's t vs. N2 d1	0.0036
S2A (2)	N2 - Fitness capacity d1 (0h+ 1hEx+ 2hEx+ 4hEx)	188		
	<i>isp-1(qm150)</i> - Fitness capacity d1 (0h+ 1hEx+ 2hEx+ 4hEx)	193	two-tailed Student's t vs. N2 d1	<.0001
	<i>nuo-6(qm200)</i> - Fitness capacity d1 (0h+ 1hEx+ 2hEx+ 4hEx)	176	two-tailed Student's t vs. N2 d1	<.0001
S2B (2)	N2 - d1 0h, 1hEx, 2hEx, 4hEx, 24hRec	37, 50, 50, 51, 42		
	<i>daf-2(e1370)</i> - d1 0h, 1hEx, 2hEx, 4hEx, 24hRec	47, 48, 47, 49, 45	two-tailed Student's t vs. N2 d1	0.0080
	<i>eat-2(ad1116)</i> - d1 0h, 1hEx, 2hEx, 4hEx, 24hRec	34, 41, 36, 40, 33	two-tailed Student's t vs. N2 d1	0.0193
S2B (2)	N2 - Fitness capacity d1 (0h+ 1hEx+ 2hEx+ 4hEx)	188		
	<i>daf-2(e1370)</i> - Fitness capacity d1 (0h+ 1hEx+ 2hEx+ 4hEx)	191	two-tailed Student's t vs. N2 d1	<.0001
	<i>eat-2(ad1116)</i> - Fitness capacity d1 (0h+ 1hEx+ 2hEx+ 4hEx)	151	two-tailed Student's t vs. N2 d1	0.0001
S2C (2)	N2 - d1 Recovery rate (24h - 0h)	37		
	<i>isp-1(qm150)</i> - d1 Recovery rate (24h - 0h)	48	two-tailed Student's t vs. N2 d1	0.2348
	<i>nuo-6(qm200)</i> - d1 Recovery rate (24h - 0h)	44	two-tailed Student's t vs. N2 d1	<.0001
S2D (2)	N2 - d1 Recovery rate (24h - 0h)	37		
	<i>daf-2(e1370)</i> - d1 Recovery rate (24h - 0h)	47	two-tailed Student's t vs. N2 d1	0.0002
	<i>eat-2(ad1116)</i> - d1 Recovery rate (24h - 0h)	34	two-tailed Student's t vs. N2 d1	0.3982
S2E (2)	<i>isp-1(qm150)</i> - Control d1	21		
	<i>isp-1(qm150)</i> - Exercise d1	22	two-tailed Student's t vs. Control d1	0.9172
	<i>isp-1(qm150)</i> - Control d10	33		
	<i>isp-1(qm150)</i> - Exercise d10	33	two-tailed Student's t vs. Control d10	0.5897
S2E (2)	<i>nuo-6(qm200)</i> - Control d1	31		
	<i>nuo-6(qm200)</i> - Exercise d1	32	two-tailed Student's t vs. Control d1	0.6668
	<i>nuo-6(qm200)</i> - Control d10	33		
	<i>nuo-6(qm200)</i> - Exercise d10	19	two-tailed Student's t vs. Control d10	0.4912

S2F (2)	<i>daf-2(e1370)</i> - Control d1	29		
	<i>daf-2(e1370)</i> - Exercise d1	28	two-tailed Student's t vs. Control d1	0.6613
	<i>daf-2(e1370)</i> - Control d10	34		
	<i>daf-2(e1370)</i> - Exercise d10	24	two-tailed Student's t vs. Control d10	0.5942
S2F (2)	<i>eat-2(ad1116)</i> - Control d1	29		
	<i>eat-2(ad1116)</i> - Exercise d1	28	two-tailed Student's t vs. Control d1	0.5150
	<i>eat-2(ad1116)</i> - Control d10	31		
	<i>eat-2(ad1116)</i> - Exercise d10	23	two-tailed Student's t vs. Control d10	0.4225
S2G (2)	N2 - Fitness capacity d1 (0h+ 1hEx+ 2hEx+ 4hEx)	149		
	CA-AAK-2 - Fitness capacity d1 (0h+ 1hEx+ 2hEx+ 4hEx)	159	two-tailed Student's t vs. N2 d1	<.0001
S2G (2)	N2 - Fitness capacity d5 (0h+ 1hEx+ 2hEx+ 4hEx)	182		
	CA-AAK-2 - Fitness capacity d5 (0h+ 1hEx+ 2hEx+ 4hEx)	179	two-tailed Student's t vs. N2 d5	<.0001
S2G (2)	N2 - Fitness capacity d10 (0h+ 1hEx+ 2hEx+ 4hEx)	174		
	CA-AAK-2 - Fitness capacity d10 (0h+ 1hEx+ 2hEx+ 4hEx)	180	two-tailed Student's t vs. N2 d10	<.0001
S2H (2)	N2 - d1 Recovery rate (24h - 0h)	38		
	CA-AAK-2 - d1 Recovery rate (24h - 0h)	40	two-tailed Student's t vs. N2 d1	0.1443
S2H (2)	N2 - d5 Recovery rate (24h - 0h)	45		
	CA-AAK-2 - d5 Recovery rate (24h - 0h)	45	two-tailed Student's t vs. N2 d5	0.0264
S2H (2)	N2 - d10 Recovery rate (24h - 0h)	44		
	CA-AAK-2 - d10 Recovery rate (24h - 0h)	44	two-tailed Student's t vs. N2 d10	0.0155
S3A (2)	N2 - Fitness capacity d1 (0h+ 1hEx+ 2hEx+ 4hEx)	149		
	<i>aak-2(gt33)</i> - Fitness capacity d1 (0h+ 1hEx+ 2hEx+ 4hEx)	154	two-tailed Student's t vs. N2 d1	<.0001
S3B (2)	N2 - d1 Recovery rate (24h - 0h)	38		
	<i>aak-2(gt33)</i> - d1 Recovery rate (24h - 0h)	38	two-tailed Student's t vs. N2 d1	0.0010
S3C (3)	<i>drp-1(tm1108)</i> - Overall capacity (d1+d5+d10+d15)	229		
	CA-AAK-2; <i>drp-1(tm1108)</i> - Overall capacity (d1+d5+d10+d15)	261	two-tailed Student's t vs. <i>drp-1</i>	0.5522
S3C (3)	<i>fzo-1(tm1133)</i> - Overall capacity (d1+d5+d10+d15)	210		
	CA-AAK-2; <i>fzo-1(tm1133)</i> - Overall capacity (d1+d5+d10+d15)	270	two-tailed Student's t vs. <i>fzo-1</i>	<.0001
S3C (3)	<i>drp-1(tm1108);fzo-1(tm1133)</i> - Overall capacity (d1+d5+d10+d15)	252		
	CA-AAK-2; <i>drp-1(tm1108);fzo-1(tm1133)</i> - Overall capacity (d1+d5+d10+d15)	237	two-tailed Student's t vs. <i>drp-1;fzo-1</i>	0.7733