

**Appendix S2 Broad-sense heritability estimates of sleep-related phenotypes of flies reared under the regular food condition.**

	<u>Total time in sleep (h/12 h)</u>		<u>Sleep-bout number (/12 h)</u>		<u>Sleep-bout length (min)</u>		<u>Wake time activity (counts/min)</u>	
	Light hours	Dark hours	Light hours	Dark hours	Light hours	Dark hours	Light hours	Dark hours
Variance components								
Replication:Line	0.37	0.75	38.4	13.6	3.82	16.6	0.021	0.038
Line	3.18	3.38	286.9	118.8	23.64	80.7	0.122	0.216
Residual	2.82	3.77	433.0	290.2	65.21	251.0	0.117	0.151
Heritability	0.50	0.43	0.38	0.28	0.26	0.23	0.47	0.53