



Supplementary Fig. 1. Experimental Schedule. After seven days of acclimatization, mice were randomly divided into three groups of the Control group (Con), the Jet lag group (JL) and the jet-lag+Carnitine group (JL+C). The schedule of feeding and chronic jet-lag is shown in Supplementary Fig. 1. Mice of the JL+C group were fed with L-carnitine containing diet, and other mice were fed with normal commercial diet (5.0 g/mouse/day), corresponding feeding time during active state (dark phase). In the Con group, mice were kept under light-dark (LD) cycle 12:12 conditions. In the JL and JL+C groups, mice were subjected to a reversal of LD cycle every 4 days for a continuous 12 weeks.