

Figure S1

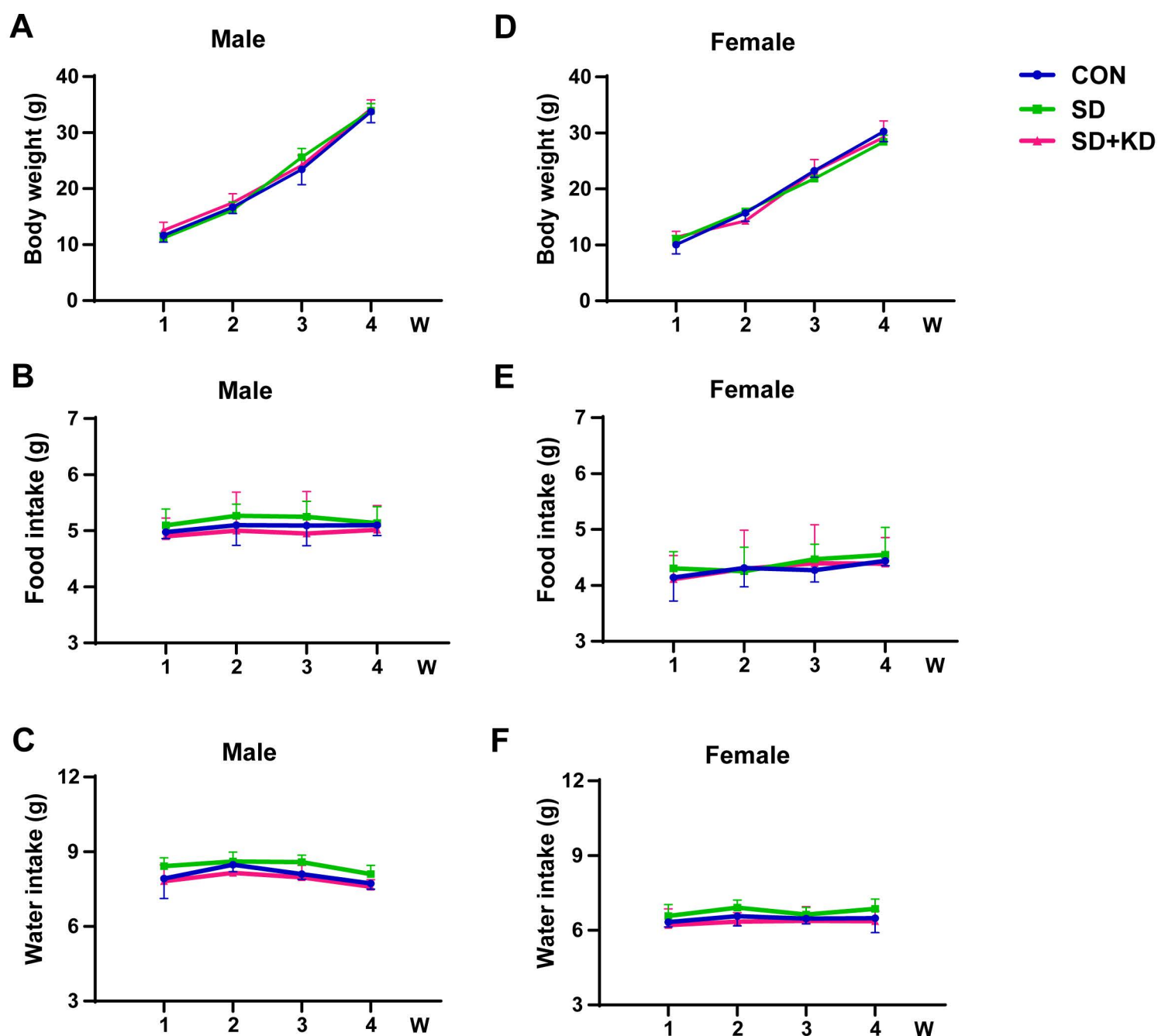


Figure S1. Late-gestational SD and post-weaning KD showed no significant impact on body weight, food intake and water intake in offspring mice

(A) Body weight in male offspring mice. (B) Food intake in male offspring mice. (C) Water intake in male offspring mice. (D) Body weight in female offspring mice. (E) Food intake in female offspring mice. (F) Water intake in female offspring mice. Data are expressed as means $\pm$ SEM. $n = 10$ per group. Multiple-group comparisons were conducted using the Kruskal-Wallis test followed by Dunn's multiple-comparisons test. * $P < 0.05$.

Figure S2

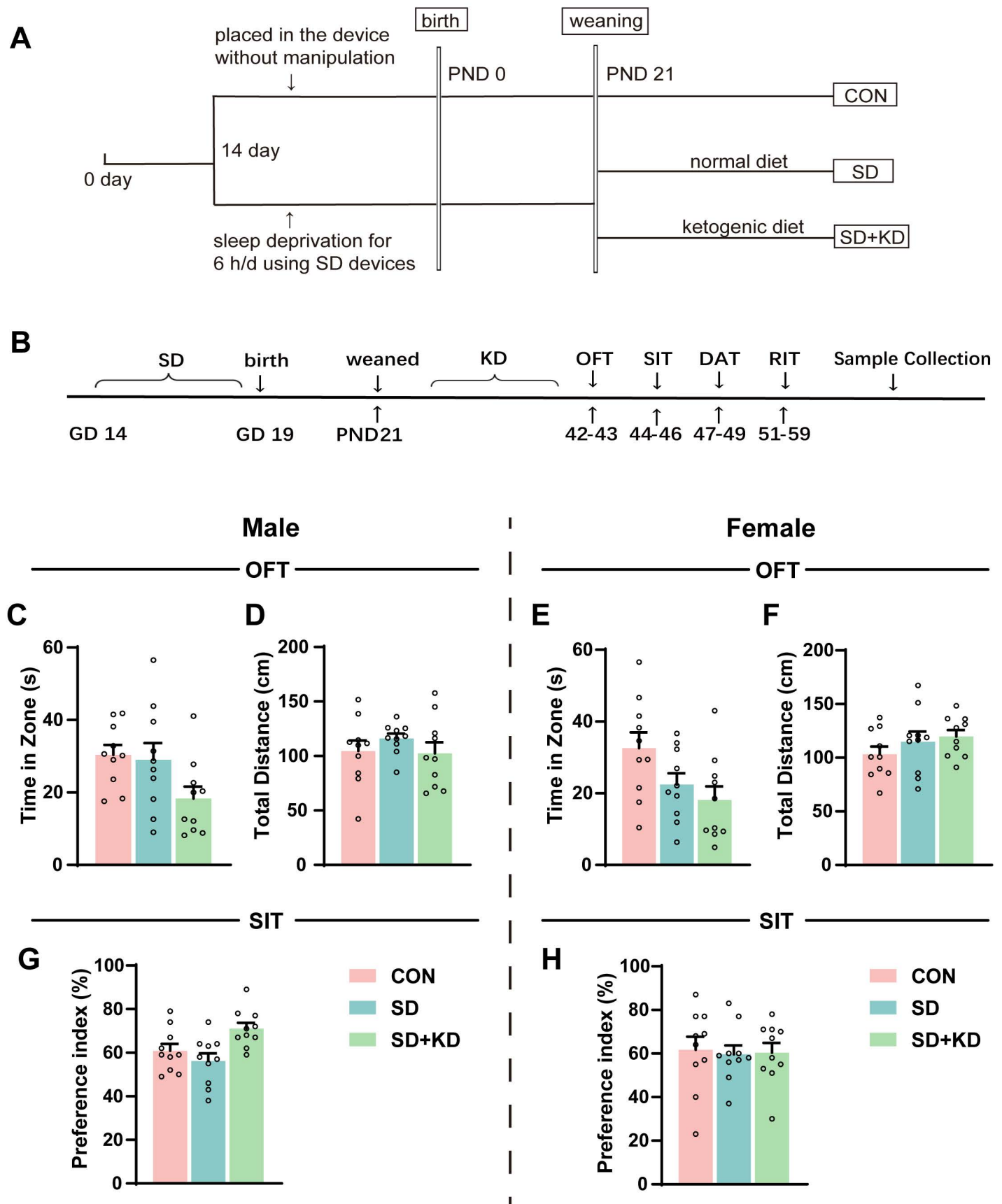


Figure S2. Late-gestational SD and post-weaning KD showed no significant impact on locomotor activity and social behavior in offspring mice

(A) Experimental procedure. (B) Experimental timeline. (C) Time spent in zone in the OFT in male offspring mice. (D) Total distance traveled during the OFT in male offspring mice. (E) Time spent in zone in the OFT in female offspring mice. (F) Total distance traveled during the OFT in female offspring mice. (G) Preference index in the SIT in male offspring mice. (H) Preference index in the SIT in female offspring mice. Data are expressed as means $\pm$ SEM. $n = 10$ per group. Multiple-group comparisons were conducted using the Kruskal-Wallis test followed by Dunn's multiple-comparisons test. * $P < 0.05$.

Figure S3

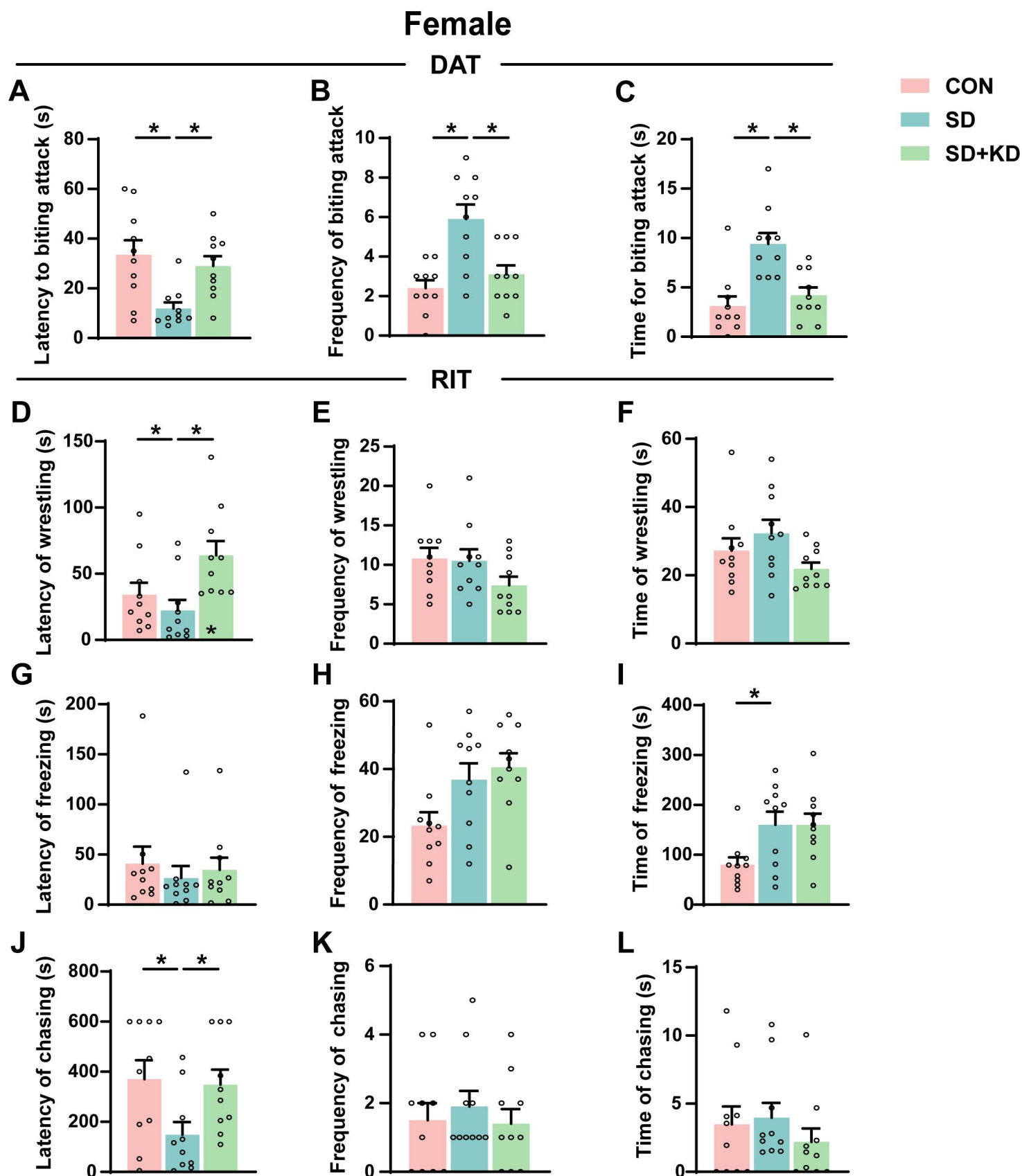


Figure S3. Post-weaning KD mitigated the increased aggression in female offspring mice induced by late-gestational SD

(A) Latency, (B) frequency and (C) time of biting attack in defensive aggressive behavior of female offspring. (D) Latency, (E) frequency and (F) time of wrestling in proactive aggressive behavior of female offspring. (G) Latency, (H) frequency and (I) time of freezing in proactive aggressive behavior of female offspring. (J) Latency, (K) frequency and (L) time of chasing in proactive aggressive behavior of female offspring. Data are expressed as means $\pm$ SEM. $n = 10$ per group. Multiple-group comparisons were conducted using the Kruskal-Wallis test followed by Dunn's multiple-comparisons test. * $P < 0.05$.

Figure S4

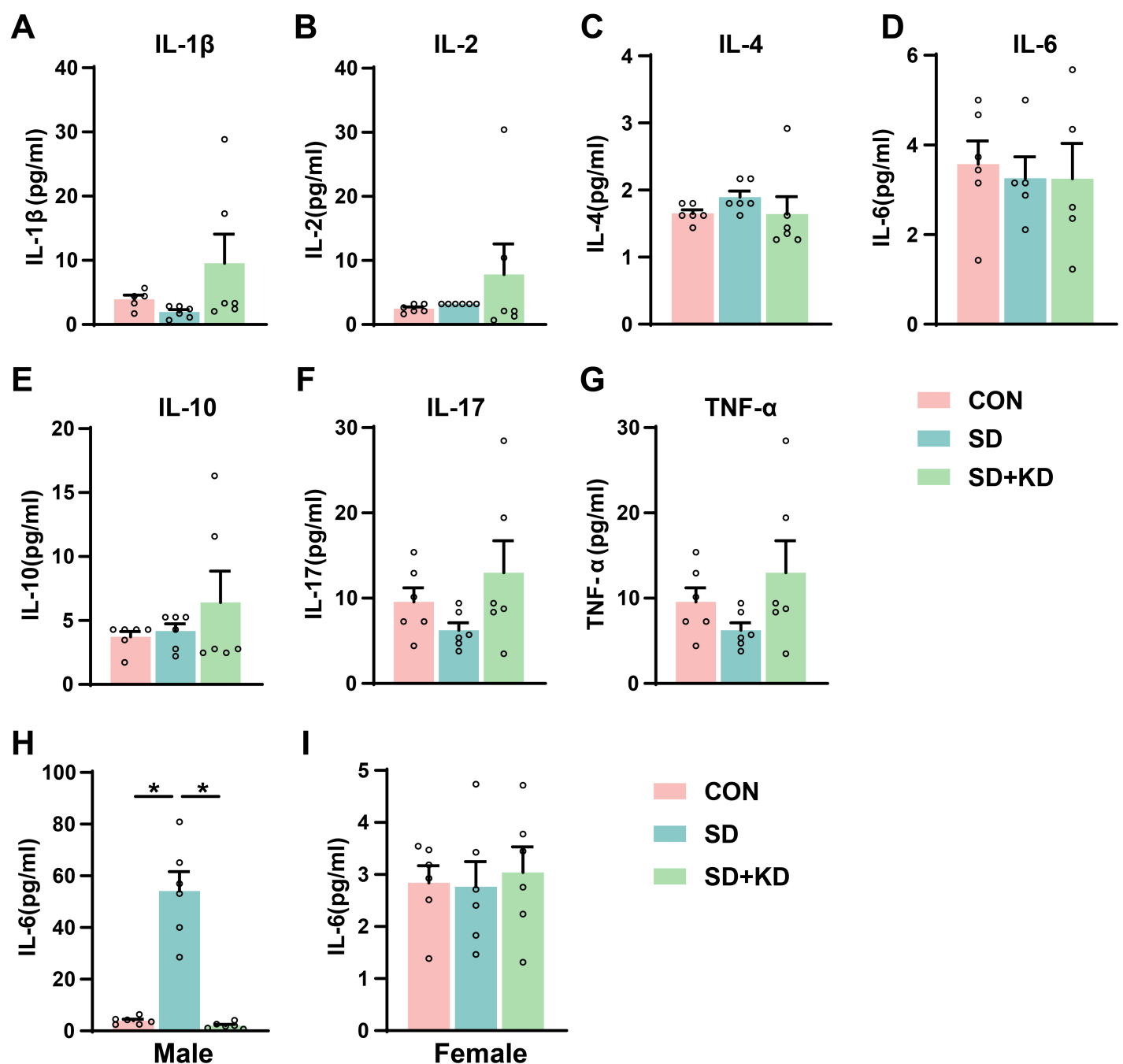


Figure S4. Effects of late-gestational sleep deprivation and post-weaning KD on peripheral immune responses in female offspring

(A) Serum IL-1 β levels (pg/ml) in female offspring. (B) Serum IL-2 levels (pg/ml) in female offspring. (C) Serum IL-4 levels (pg/ml) in female offspring. (D) Serum IL-6 levels (pg/ml) in female offspring. (E) Serum IL-10 levels (pg/ml) in female offspring. (F) Serum IL-17 levels (pg/ml) in female offspring. (G) Serum TNF- α levels (pg/ml) in female offspring. (H) Serum IL-6 levels (pg/ml) in male offspring determined by ELISA. (I) Serum IL-6 levels (pg/ml) in female offspring determined by ELISA. Data are expressed as means $\pm$ SEM. $n = 6$ per group. Multiple-group comparisons were conducted using the Kruskal-Wallis test followed by Dunn's multiple-comparisons test. * $P < 0.05$.

Figure S5

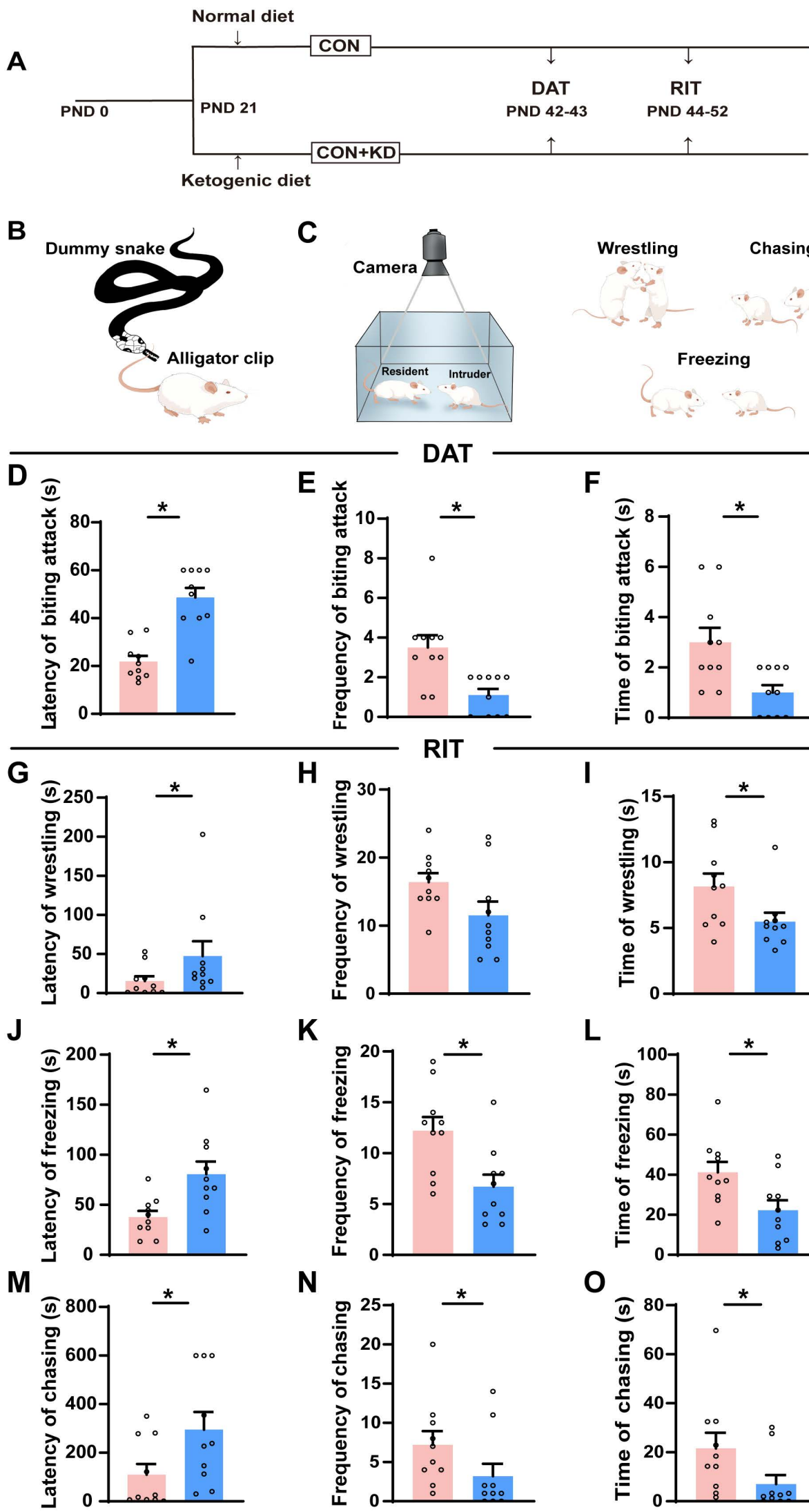


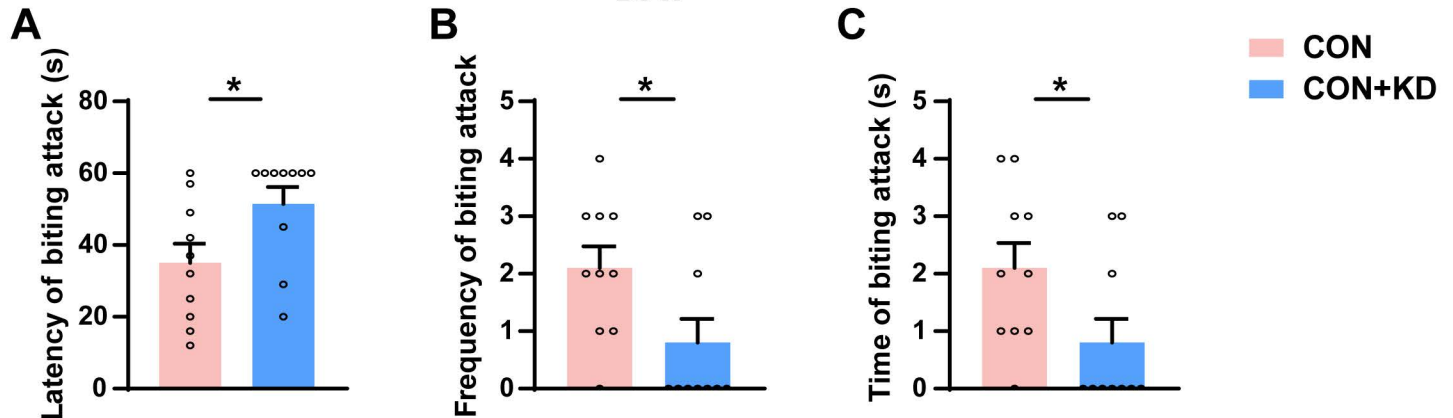
Figure S5. Post-weaning KD attenuated aggressive behavior in normal male mice

(A)-(C) Experimental timeline and schematic. (D) Latency, (E) frequency and (F) time of biting attack in DAT. (G) Latency, (H) frequency and (I) time of wrestling in RIT. (J) Latency, (K) frequency and (L) time of freezing in RIT. (M) Latency, (N) frequency and (O) time of chasing in RIT. Data are expressed as means $\pm$ SEM. $n = 10$ per group. Comparisons between two groups were performed using Student's t-test or the Mann-Whitney U test, as appropriate. * $P < 0.05$.

Figure S6

Female

DAT



RIT

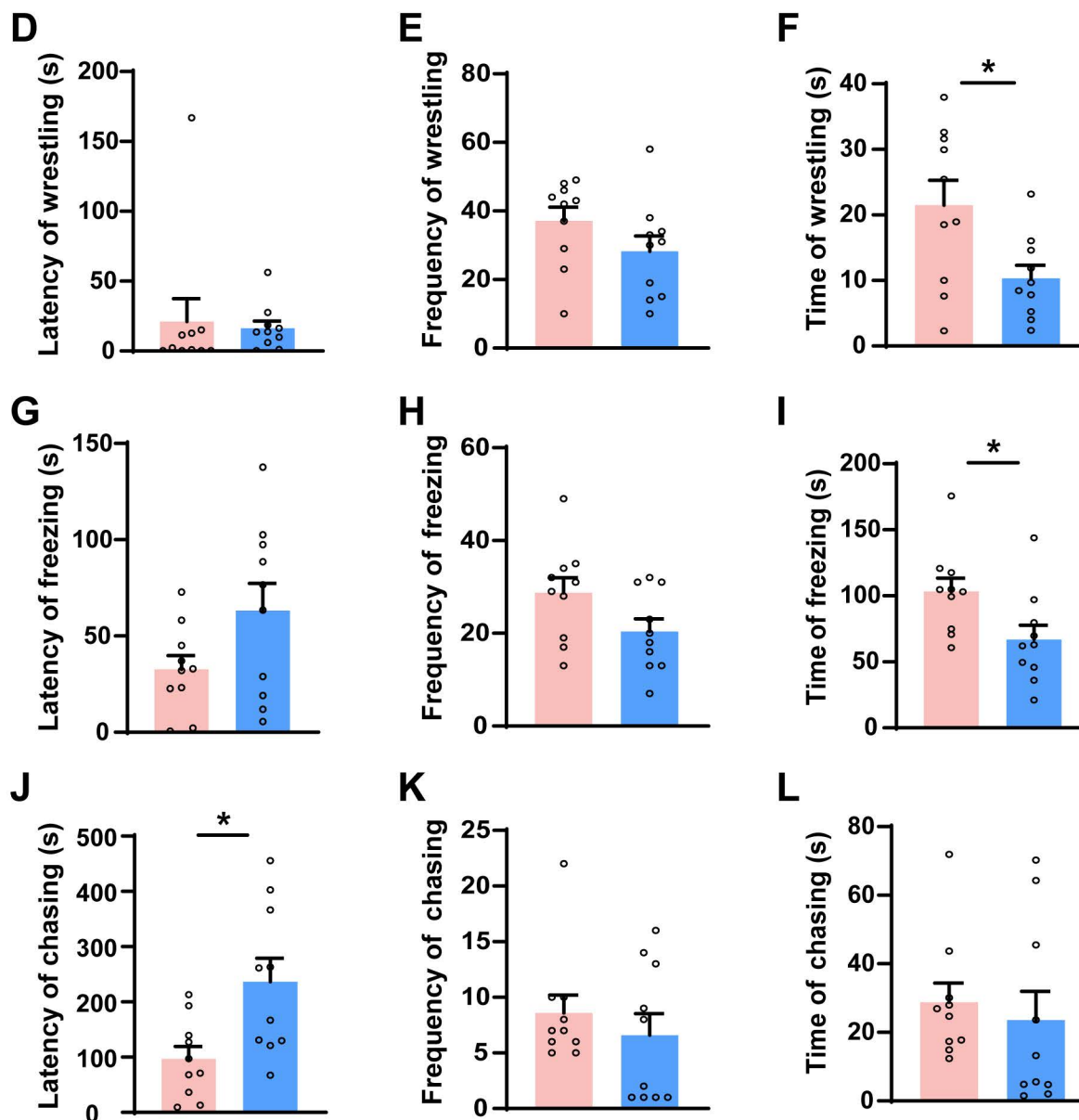


Figure S6. Post-weaning KD partially reduced aggressive behavior in normal female mice

(A) Latency, (B) frequency and (C) time of biting attack in DAT. (D) Latency, (E) frequency and (F) time of wrestling in RIT. (G) Latency, (H) frequency and (I) time of freezing in RIT. (J) Latency, (K) frequency and (L) time of chasing in RIT. Data are expressed as means $\pm$ SEM. $n = 10$ per group. Comparisons between two groups were performed using Student's t -test or the Mann-Whitney U test, as appropriate. * $P < 0.05$.