



Supplementary Fig. 1. Early weaning has no significant influence on glucose homeostasis and BCAA catabolic metabolism by d 63. *A & B*: Relative organ weight of control Wistar/SD rat and early-weaned rat at 23 (Wistar) and 25 (SD) days of age (n=6). *C & D*: Glucose tolerance test (GTT) and insulin tolerance test (ITT) in rats of EW_{WIS} group and C_{WIS} group

before d 63 (n=6). *E*: Area under the curve (AUC) of GTT and ITT, homeostasis model assessment of insulin resistance (HOMA-IR), and improved insulin sensitivity index (ISI). *F* & *H*: Serum BCAA levels and mRNA levels of key BCAA catabolic enzymes of control rat and early-weaned rat at 23 and 63 days of age (n=6). *G* & *I*: The key BCAA catabolism enzymes of Wistar rats at 23 (n=10) and 63 (n=6) days of age. Values are means \pm SEM. FPKM: Fragments per kilobase of transcript per million reads mapped; Bcatm: Branched chain amino acid transaminase 2; Bckdha: Branched chain keto acid dehydrogenase E1 subunit alpha.