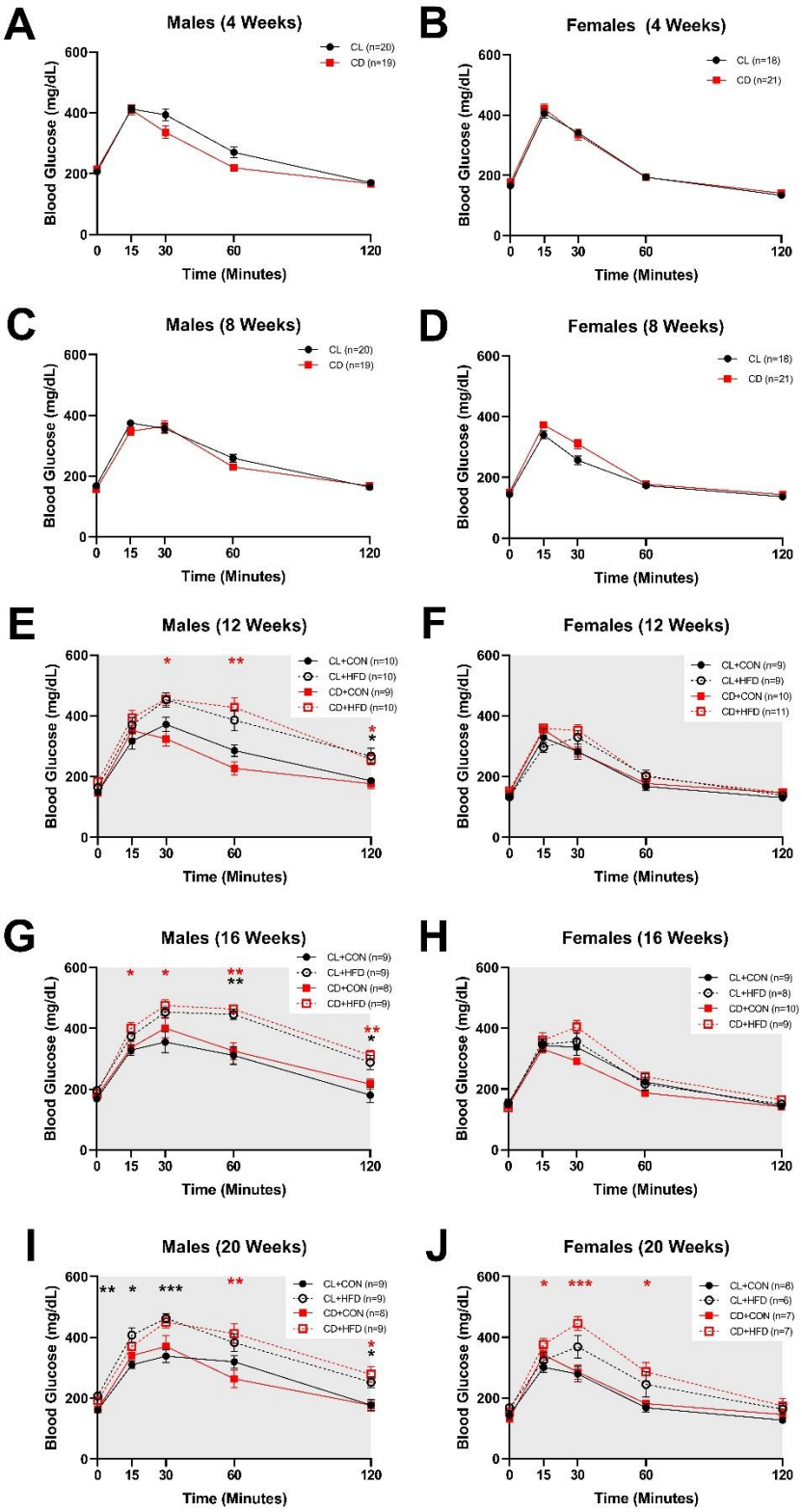
A
Males (4 Weeks)
CL (n=20)
CD (n=19)
Blood Glucose (mg/dL)
Time (Minutes)
B
Females (4 Weeks)
CL (n=18)
CD (n=21)
Blood Glucose (mg/dL)
Time (Minutes)
C
Males (8 Weeks)
CL (n=20)
CD (n=19)
Blood Glucose (mg/dL)
Time (Minutes)
D
Females (8 Weeks)
CL (n=18)
CD (n=21)
Blood Glucose (mg/dL)
Time (Minutes)
E
Males (12 Weeks)
CL+CON (n=10)
CL+HFD (n=10)
CD+CON (n=9)
CD+HFD (n=10)
Blood Glucose (mg/dL)
Time (Minutes)
F
Females (12 Weeks)
CL+CON (n=9)
CL+HFD (n=9)
CD+CON (n=10)
CD+HFD (n=11)
Blood Glucose (mg/dL)
Time (Minutes)
G
Males (16 Weeks)
CL+CON (n=9)
CL+HFD (n=9)
CD+CON (n=8)
CD+HFD (n=9)
Blood Glucose (mg/dL)
Time (Minutes)
H
Females (16 Weeks)
CL+CON (n=9)
CL+HFD (n=8)
CD+CON (n=10)
CD+HFD (n=9)
Blood Glucose (mg/dL)
Time (Minutes)
I
Males (20 Weeks)
CL+CON (n=9)
CL+HFD (n=9)
CD+CON (n=8)
CD+HFD (n=9)
Blood Glucose (mg/dL)
Time (Minutes)
J
Females (20 Weeks)
CL+CON (n=8)
CL+HFD (n=6)
CD+CON (n=7)
CD+HFD (n=7)
Blood Glucose (mg/dL)
Time (Minutes)

Supplemental Figure 1. Males on HFD have abnormal glucose tolerance earlier than females. Male and female glucose tolerance at (**A-B**) 4 weeks of age and (**C-D**) 8 weeks of age, prior to diet treatment. (**E-F**) Male and female glucose tolerance at 12 weeks of age; CD+HFD males developed hyperglycemia by 15 minutes and remained elevated while CL+HFD males didn't show significantly increased blood glucose until 120 minutes ($p<0.05$). (**G-H**) Male and female glucose tolerance at 16 weeks of age; CD+HFD males developed hyperglycemia by 15 minutes and remained elevated compared to CL+HFD males which wasn't significantly elevated until 60 minutes ($p<0.05$). (**I-J**) Male and female glucose tolerance at 20 weeks of age; CD+HFD males developed hyperglycemia by 60 minutes and CL+HFD males by baseline ($p<0.05$); CD+HFD females had hyperglycemia by 15 minutes and remained elevated ($p<0.05$). Data are presented as mean ± SEM and analyzed by 2-way ANOVAs with Dunnett tests. *$p<0.05$ **$p<0.01$ ***$p<0.001$ ****$p<0.0001$ vs CL+CON group. Black asterisks indicate CL+HFD group and red asterisks indicate CD+HFD groups. Grey shading indicates period of diet treatment. For males, CL+CON n=9-10, CL+HFD n=9-10, CD+CON n=8-9, CD+HFD n=9-10 at each timepoint; for females, CL+CON n=8-9, CL+HFD n=6-9, CD+CON n=7-10, CD+HFD n=7-11 at each timepoint.