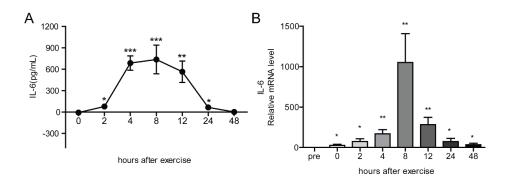
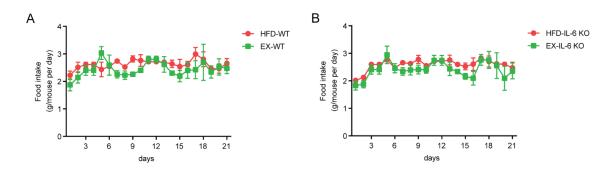
### **Supplementary Material**

## **Supplementary Figure 1**



Supplementary Figure 1. Effect of a single exercise training on IL-6 expression. (A) Plasma IL-6 concentrations and (B) muscle IL-6 mRNA expression in C57BL/6 mice after a single exercise training. Data represent the mean  $\pm$  SEM. \* P < 0.05 compared with the control group, \*\*\* P < 0.01 compared with the control group, \*\*\* P < 0.001 compared with the control group

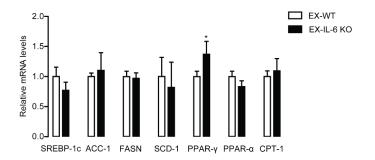
#### **Supplementary Figure 2**



Supplementary Figure 2. Effect of exercise training on food intake. Food intake per mouse in HFD group and EX group of WT mice (A) and IL-6<sup>-/-</sup> mice (B). Data represent the mean  $\pm$  SEM, n = 6-8 in each group.

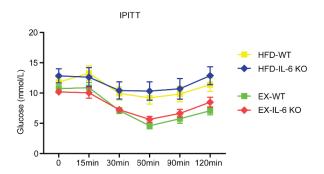
# **Supplementary Figure 3**

### Supplementary Material



Supplementary Figure 3. The expression of lipogenic genes in liver samples after HFD feeding and exercise training. Hepatic mRNA levels of SREBP-1c, ACC-1, FASN, SCD-1, PPAR- $\gamma$ , PPAR- $\alpha$  and CPT-1 analyzed by Real-time PCR. Data represent the mean  $\pm$  SEM, n = 6-8 in each group. \* P < 0.05.

## **Supplementary Figure 4**



Supplementary Figure 4. Effect of exercise training on HFD-induced insulin resistance. Intraperitoneal insulin tolerance test (IPTT) in HFD group and EX group of WT mice and IL-6-/- mice. Data represent the mean  $\pm$  SEM, n = 6-8 in each group.