Extended Data Figure 3 Source data: JNK activation with acute exercise, uncropped blots

NOD sedentary or acute exercise loading:

Lane:
1, 5, 9, 13, 17, 21: NOD sedentary (SED)
2, 3, 4, 6, 7, 8, 10, 11, 12, 14, 15, 16, 18, 19, 20, 22, 23, 24: NOD Acute exercise (AEX)

a) Exercise-activated JNK: NOD mice

Stainfree Loading, NOD mice
Extended Data Figure 3 Source data: JNK activation with acute exercise, uncropped blots

Acute glucose injection + acute exercise loading:

Lane:
1, 5, 9, 13, 17: control sedentary (C SED)
2, 6, 10, 14, 18: 3 g/kg glucose sedentary (Glu. SED)
3, 7, 11, 15, 19: control acute exercise (C AEX)
4, 8, 12, 16, 20: 3 g/kg glucose acute exercise (Glu. AEX)

b) JNK activation with acute glucose injection

Stainfree Loading, Acute glucose injection
Extended Data Figure 3 Source data: JNK activation with acute exercise, uncropped blots

**Gel 1, 8-16-32 wk Control diet + acute exercise loading:**

**Lane:**
1, 2: Control sedentary (CON SED); 8 wk
3, 4: Control acute exercise (CON AEX); 8 wk
5, 6: CON SED; 16 wk
7, 8: CON AEX; 16 wk
9, 10: CON SED, 32 wk
11, 12: CON AEX; 32 wk
13, 14: CON SED; 8 wk
15, 16: CON AEX; 8 wk
17, 18: CON SED; 16 wk
19, 20: CON AEX; 16 wk
21, 22: CON SED; 32 wk
23, 24: CON AEX; 32 wk

d) Time course of exercise-activated JNK with Western Diet feeding

Control animals (CON)

Stainfree Loading, Control animals (CON)
Extended Data Figure 3 Source data: JNK activation with acute exercise, uncropped blots

**Gel 2, 8-16-32 wk Western Diet + acute exercise loading:**

**Lane:**
1, 2: Western Diet sedentary (WD SED); 8 wk
3, 4: Western Diet acute exercise (AEX); 8 wk
5, 6: WD SED; 16 wk
7, 8: WD AEX; 16 wk
9, 10: WD SED, 32 wk
11, 12: WD AEX; 32 wk
13, 14: WD SED; 8 wk
15, 16: WD AEX; 8 wk
17, 18: WD SED; 16 wk
19, 20: WD AEX; 16 wk
21, 22: WD SED; 32 wk
23, 24: WD AEX; 32 wk

**d) Time course of exercise-activated JNK with Western Diet feeding**

**Western Diet animals (WD)**

![Western Diet animals blots](image1)

**Stainfree Loading, WD animals (WD)**

![Stainfree Loading blots](image2)