

Expanded View Figures

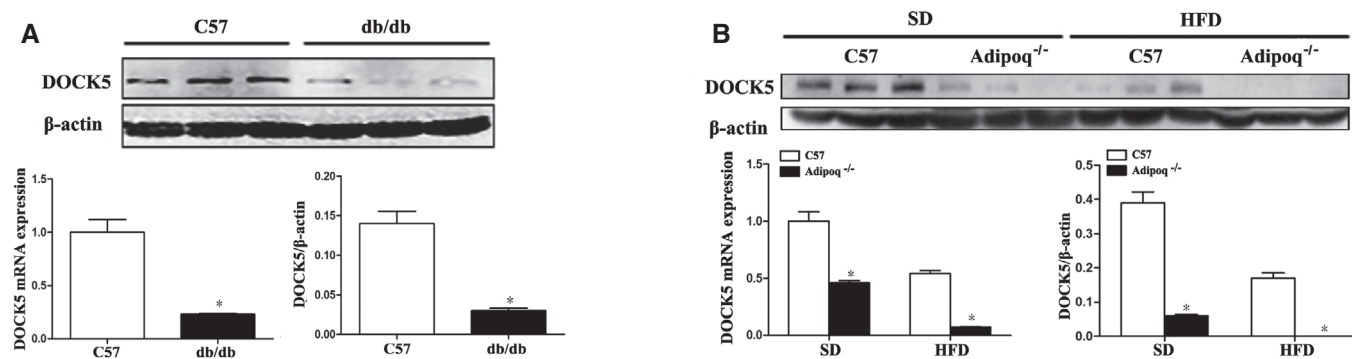


Figure EV1. Hepatic DOCK5 is down-regulated in insulin-resistant and obese mice.

A DOCK5 mRNA and protein expression in the livers of db/db and C57BL/6j mice.

B DOCK5 mRNA and protein expression in the livers of SD- or HFD-fed C57BL/6j and Adipoq^{-/-} mice. SD, standard chow diet; HFD, high-fat diet. Data are expressed as the mean \pm SEM ($n = 3$ for each group). P -values were determined with t -test, * $P < 0.01$ compared with C57BL/6j mice.

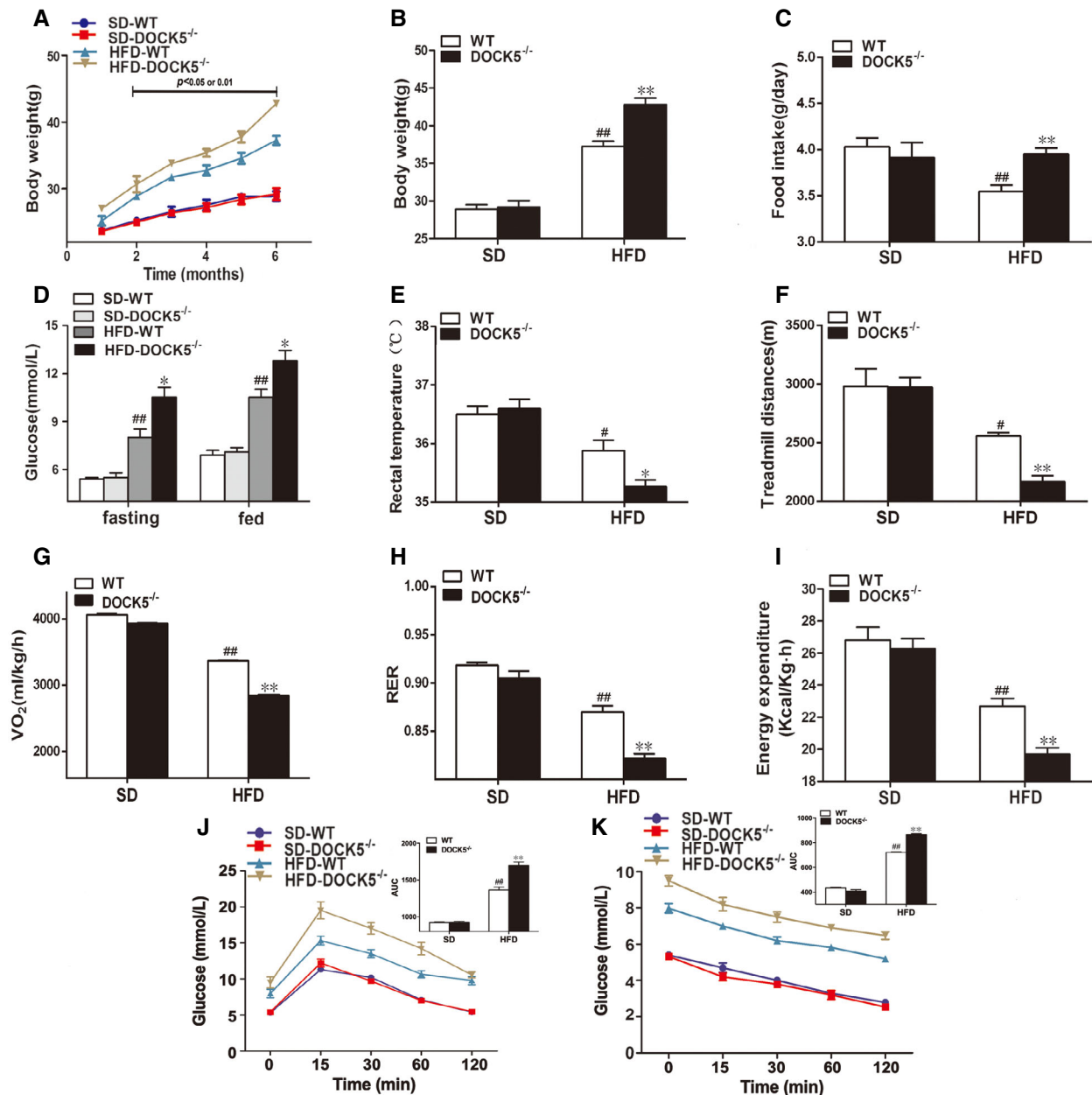


Figure EV2. Changes in body weight and energy expenditure in 8-month-old mice.

Eight-week-old male WT and *DOCK5*^{-/-} mice were fed a SD or a HFD for 6 months.

- A Body weight curve.
- B Cumulative body weight.
- C Average daily food intake.
- D Fasting and fed blood glucose.
- E Rectal temperature.
- F Locomotor tolerance.
- G V_{O_2} .
- H RER.
- I Energy expenditure.
- J GTTs.
- K ITTs.

Data information: SD, standard chow diet; HFD, high-fat diet; V_{O_2} , 24-h oxygen consumption; RER, respiratory exchange ratio. Data are expressed as the mean \pm SEM (n = 5–6 for each group). P-values were determined with two-way ANOVA. #P < 0.05, ##P < 0.01 versus SD-WT; *P < 0.05, **P < 0.01 versus HFD-WT.

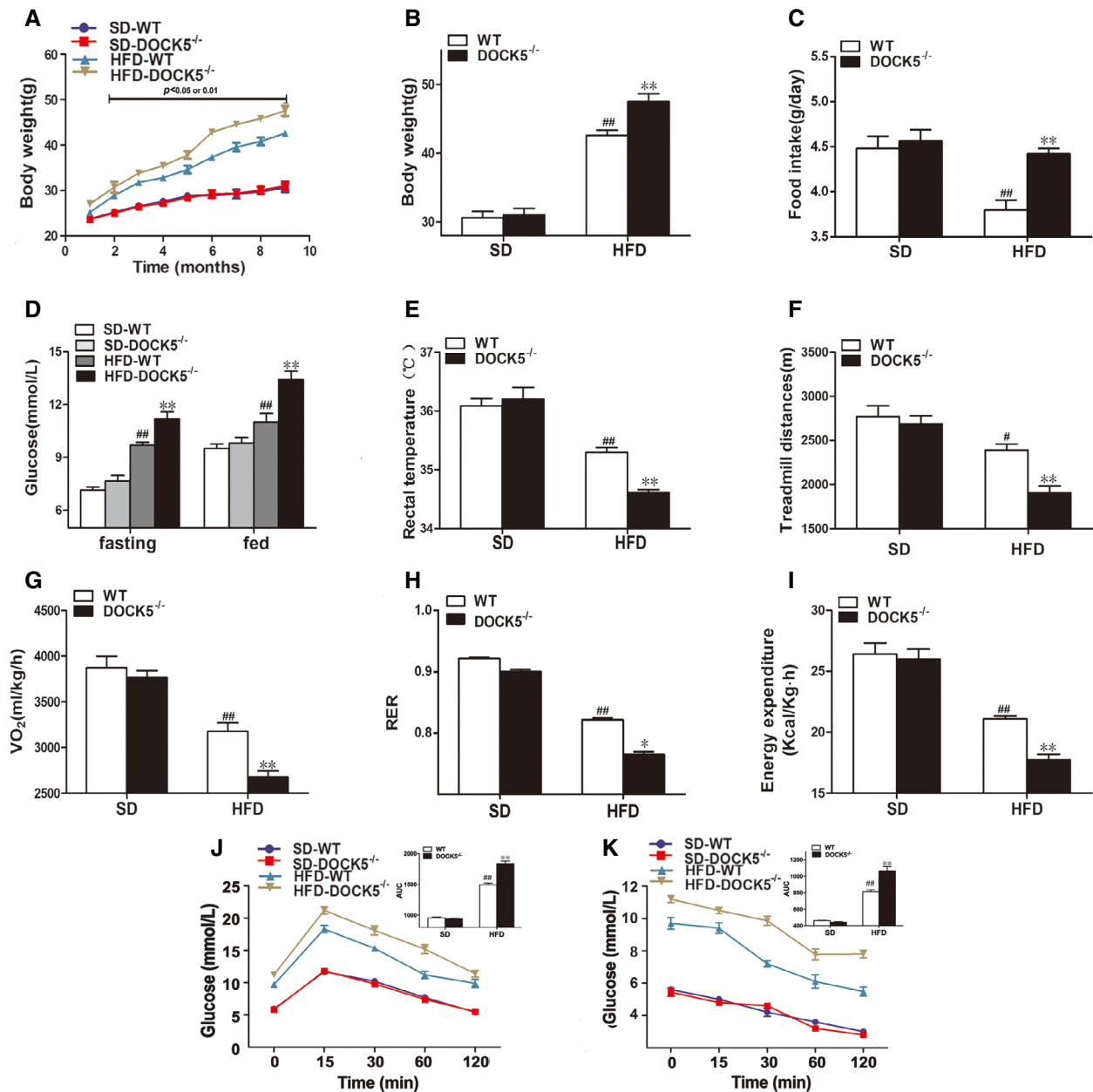


Figure EV3. Changes in body weight and energy expenditure in 11-month-old mice.

Eight-week-old male WT and DOCK5^{-/-} mice were fed a SD or a HFD for 9 months.

- A Body weight curve.
- B Cumulative body weight.
- C Average daily food intake.
- D Fasting and fed blood glucose.
- E Rectal temperature.
- F Locomotor tolerance.
- G VO_2 .
- H RER.
- I Energy expenditure.
- J GTTs.
- K ITTs.

Data information: SD, normal chow diet; HFD, high-fat diet. Data are expressed as the mean \pm SEM ($n = 5-6$ for each group). P -values were determined with two-way ANOVA. # $P < 0.05$, ## $P < 0.01$ versus SD-WT; * $P < 0.05$, ** $P < 0.01$ versus HFD-WT.

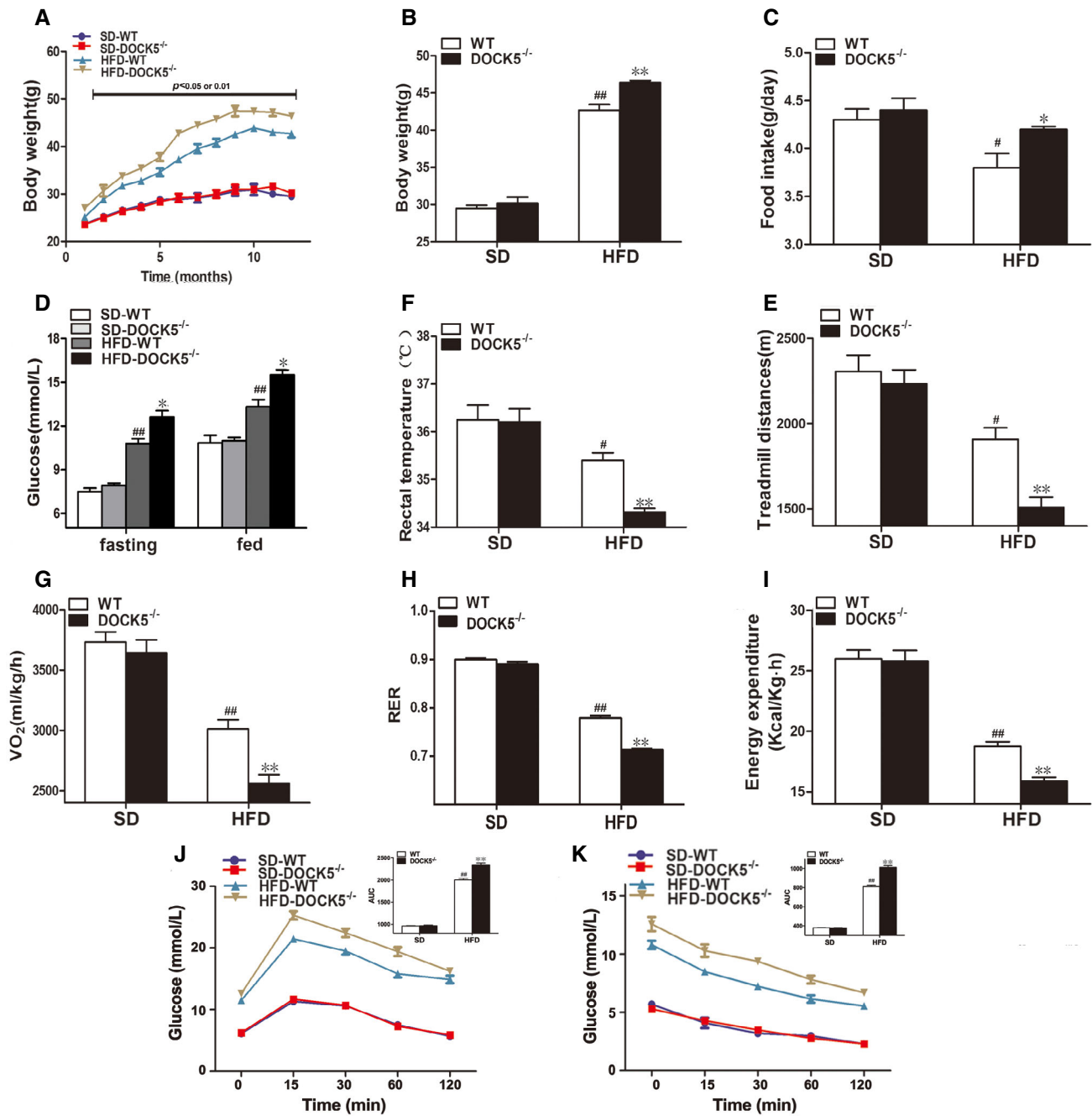


Figure EV4. Changes in body weight and energy expenditure in 14-month-old mice.

Eight-week-old male WT and DOCK5^{-/-} mice were fed a SD or a HFD for 12 months.

- A Body weight curve.
- B Cumulative body weight.
- C Average daily food intake.
- D Fasting and fed blood glucose.
- E Rectal temperature.
- F Locomotor tolerance.
- G VO_2 .
- H RER.
- I Energy expenditure.
- J GTTs.
- K ITTs.

Data information: SD, standard chow diet; HFD, high-fat diet. Data are expressed as the mean \pm SEM ($n = 6$ for each group). P -values were determined with two-way ANOVA. ## $P < 0.05$, ### $P < 0.01$ versus SD-WT; * $P < 0.05$, ** $P < 0.01$ versus HFD-WT.

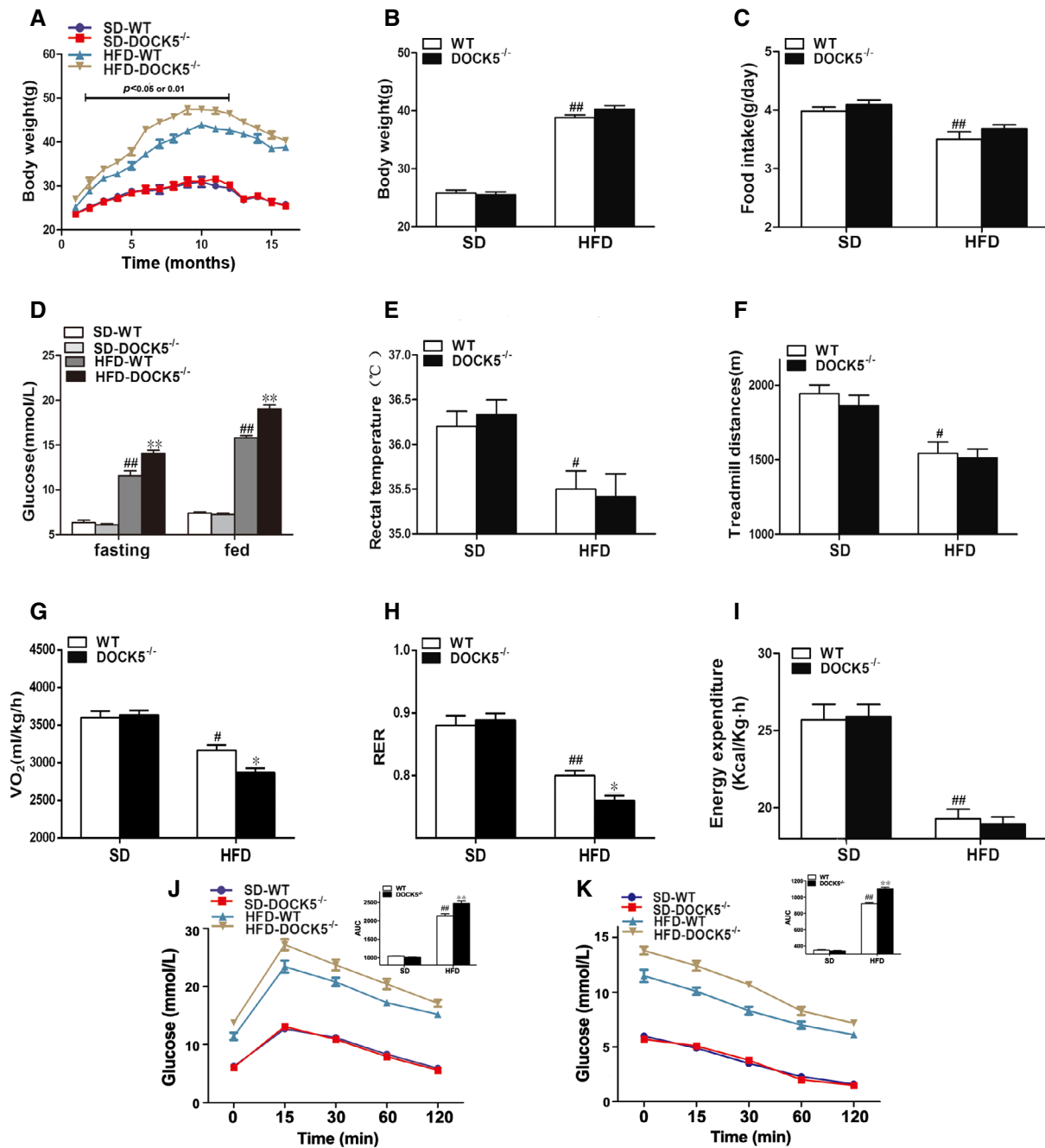


Figure EV5. Changes in body weight and energy expenditure in 18-month-old mice.

Eight-week-old male WT and DOCK5^{-/-} mice were fed a SD or a HFD for 16 months.

- A Body weight curve.
- B Cumulative body weight.
- C Average daily food intake.
- D Fasting and fed blood glucose.
- E Rectal temperature.
- F Locomotor tolerance.
- G VO_2 .
- H RER.
- I Energy expenditure.
- J GTTs.
- K ITTs.

Data information: SD, standard chow diet; HFD, high-fat diet. Data are expressed as the mean \pm SEM ($n = 5-6$ for each group). # $P < 0.05$, ## $P < 0.01$ versus SD-WT; P -values were determined with two-way ANOVA. * $P < 0.05$, ** $P < 0.01$ versus HFD-WT.