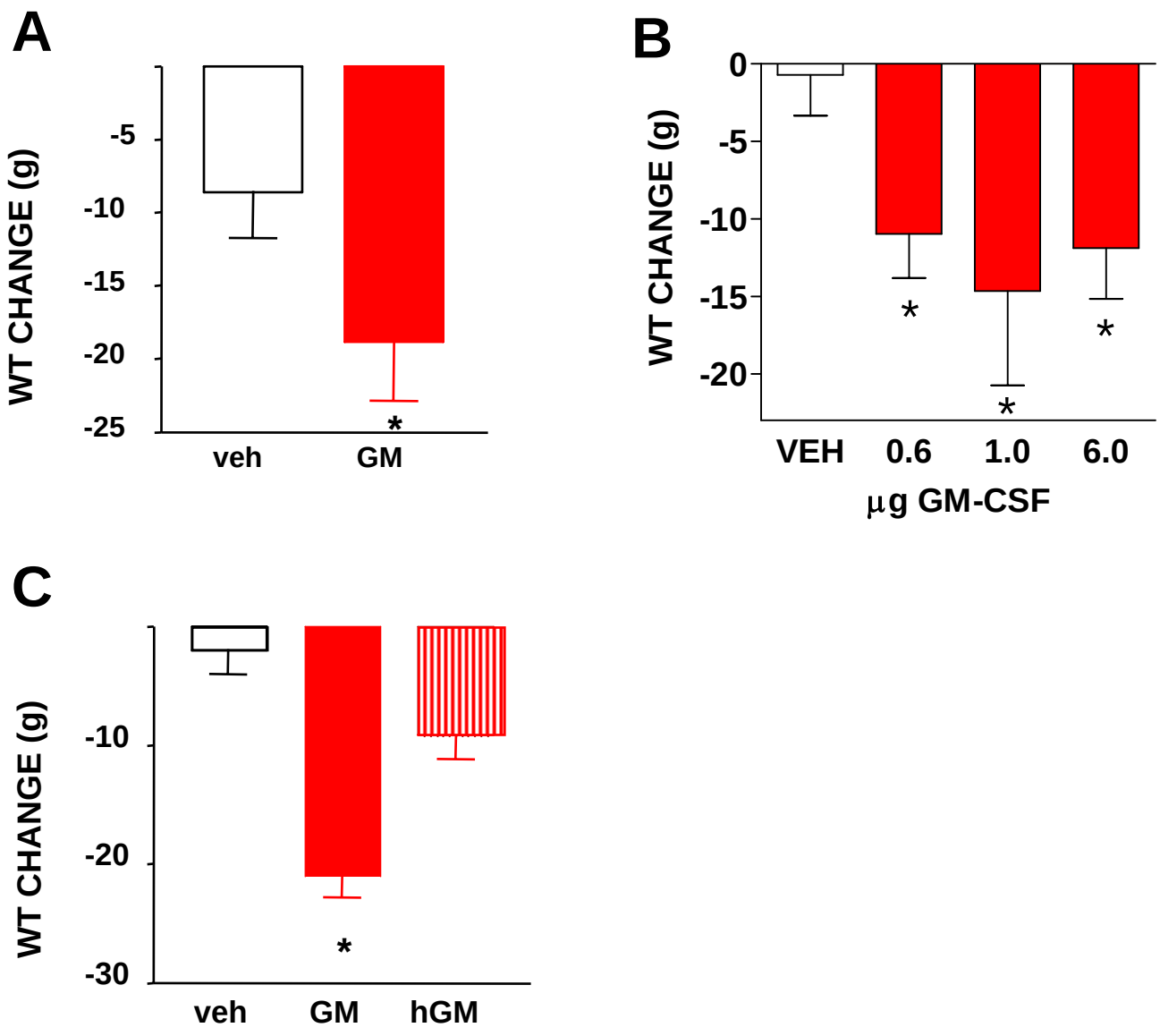
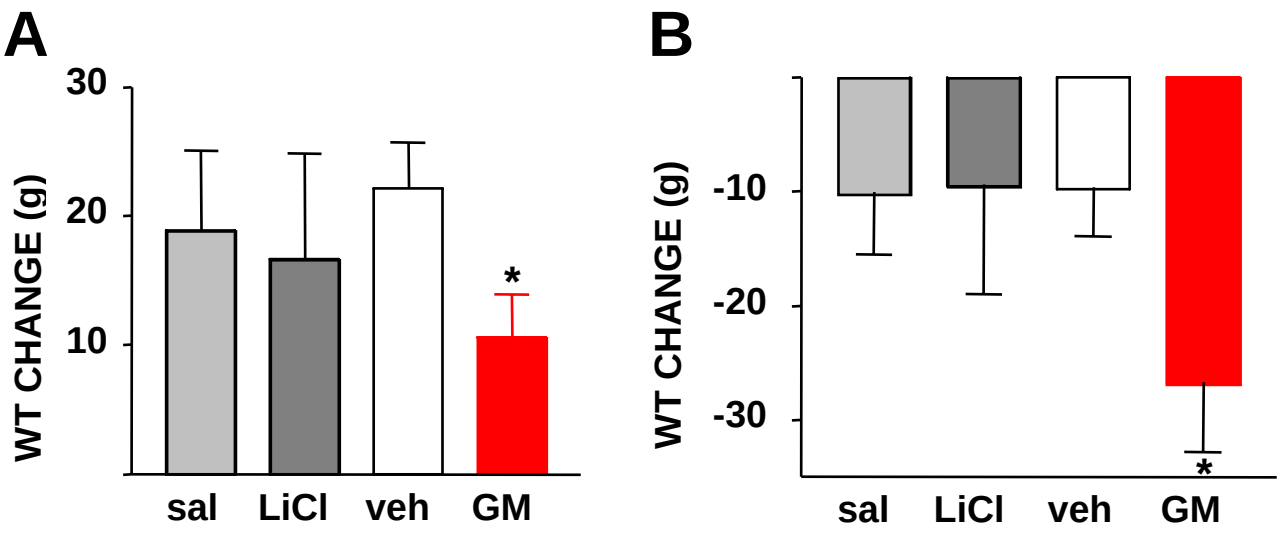
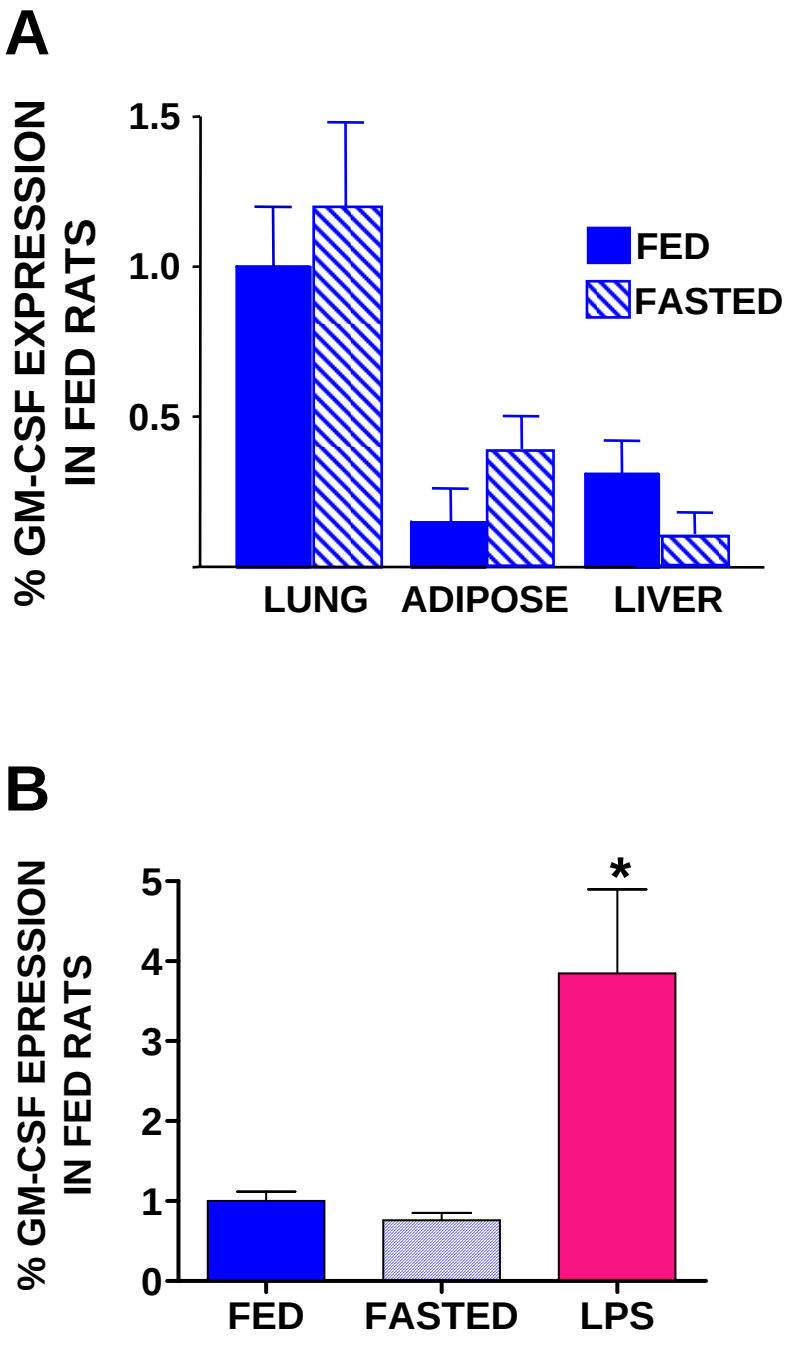
SUPPLEMENTAL FIGUR E 1



SUPPLEMENTAL FIGURE 2



SUPPLEMENTAL FIGURE 3



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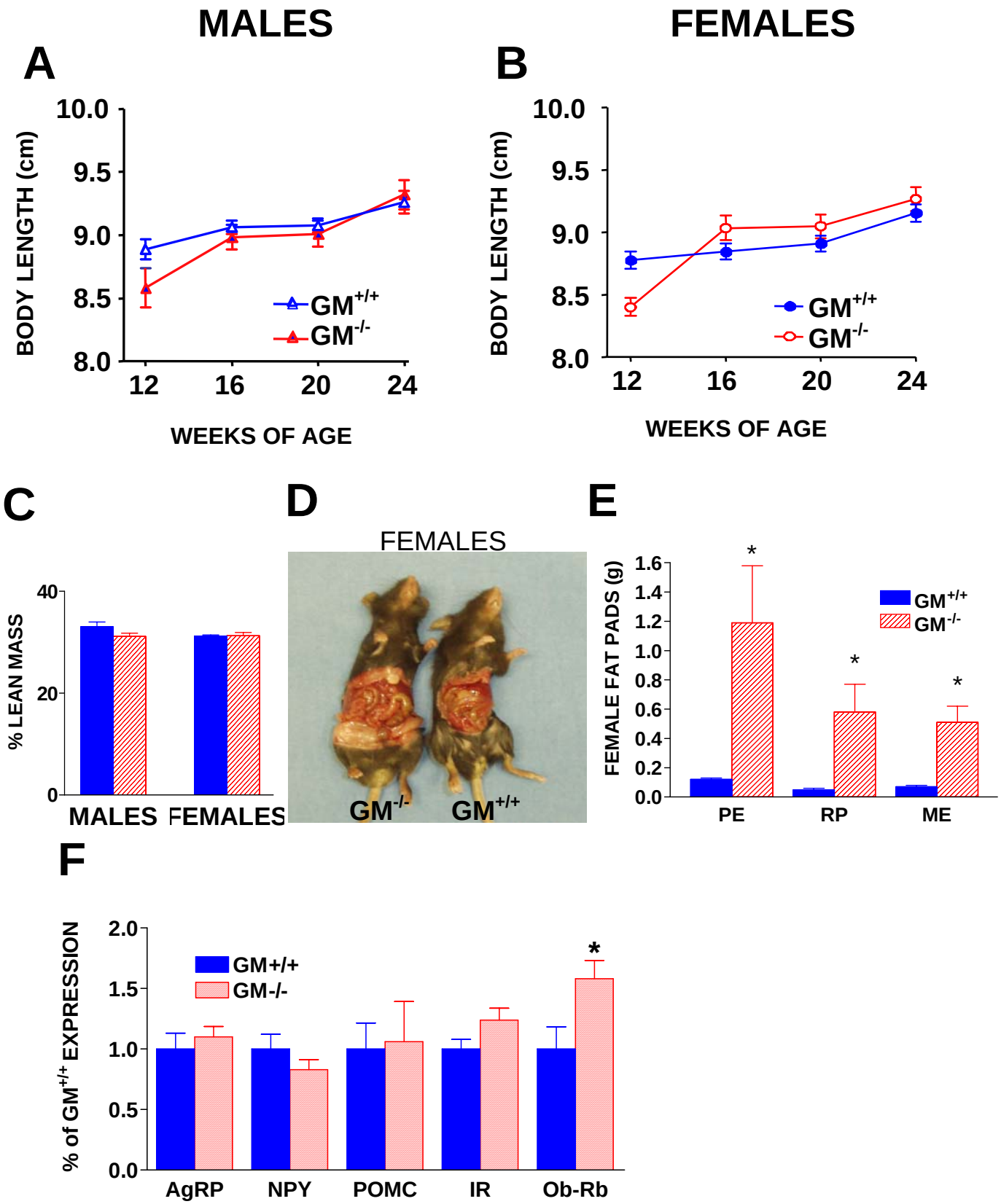

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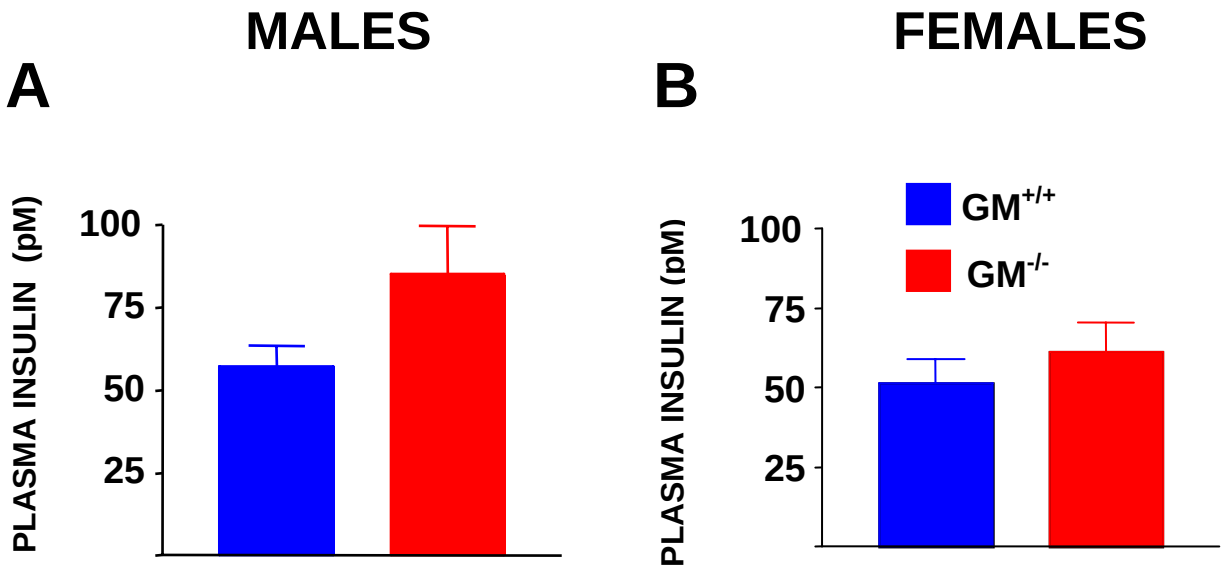

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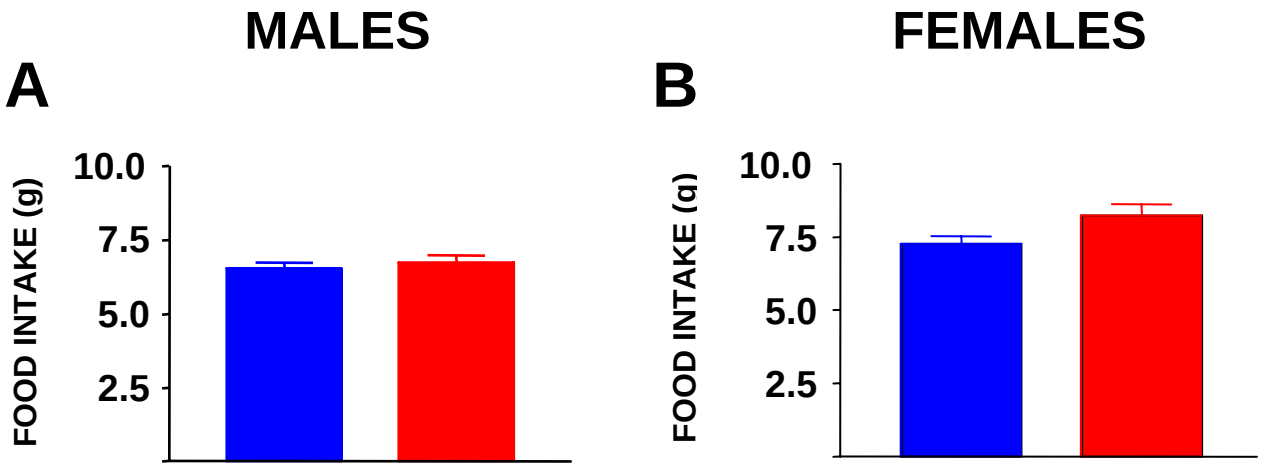

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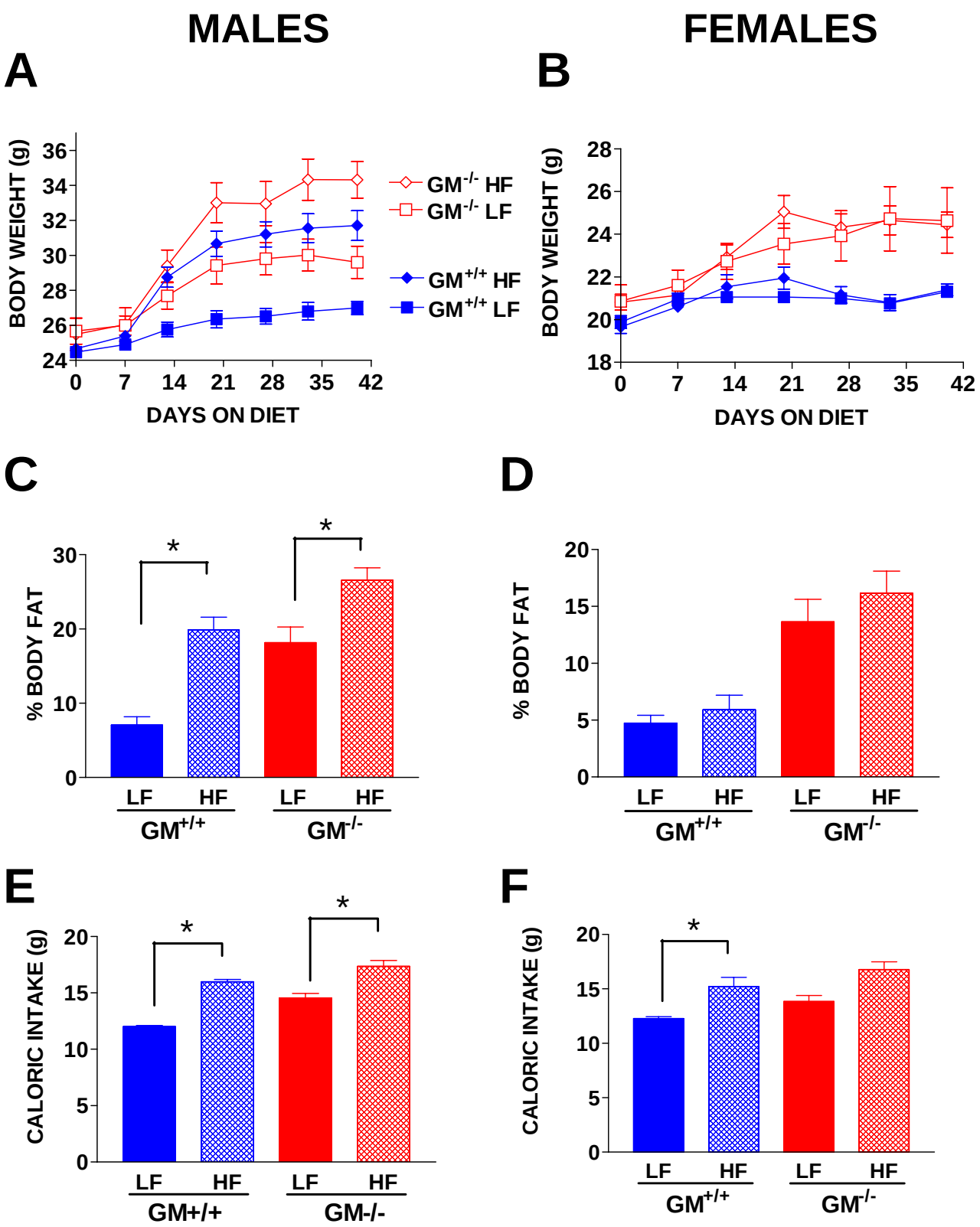

Figure Legends for Supplemental Figures

Supplemental Figure 1

GM-CSF injections in rats. (**A**) Rats injected with 0.6 μg i3vt GM-CSF (GM) had a greater decrease in body weight at 24 h post-injection, compared with rats receiving i3vt vehicle (veh) injection. (**B**) Body weight loss in rats injected with 0.6, 1.0, or 6.0 μg did not differ significantly at any time point, as shown here at 48 h post-injection. (**C**) Rats receiving 0.6 μg rat GM-CSF had significantly greater change in body weight at 24 h post-injection, compared to vehicle- and human GM-CSF- (hGM) injected rats. Rats receiving 0.6 μg hGM did not differ significantly from vehicle-treated rats. (*$p<0.05$, all groups N = 7 to 9, mean ± SEM.)

Supplemental Figure 2

Food intake and body weight associated with sodium appetite test. Following sodium appetite test, (**A**) food intake in rats receiving i3vt GM-CSF (0.6 μg) was significantly decreased and (**B**) body weight change was significantly greater, compared to i3vt vehicle-treated or i.p. saline- (sal) or lithium chloride (LiCl)-treated groups. (*$p<0.05$, all groups N = 7 to 9, mean ± SEM.)

Supplemental Figure 3

GM-CSF mRNA expression. (A) Peripheral GM-CSF expression in ad lib-fed and 48-h fasted rats. Semi-quantitative RT-PCR for GM-CSF detected transcripts in lung, adipose, and liver RNA from fasted and fed rats. GM-CSF was normalized to housekeeping gene

L32, and mean value of GM-CSF in fed lung was set at 1. Expression in fasted lung and other tissues is expressed relative to that of fed lung. GM-CSF RNA accumulation did not differ significantly between groups. (n = 5 to 8) (**B**) GM-CSF expression was measured by Q-PCR in hypothalamus from fed, 48 h-fasted, or fed LPS-treated rats. Compared to expression in fed animals, GM-CSF expression was not significantly decreased in fasted animals and was increased in animals injected with LPS

Supplemental Figure 4

Characterization of age- and sex-matched $GM^{-/-}$ and $GM^{+/+}$ mice. Body lengths of (**A**) male and (**B**) female $GM^{-/-}$ and $GM^{+/+}$ mice differed slightly at 12 weeks, but were similar at all other time points. (*$p<0.05$, n = 7-9, mean ± SEM). (**C**) The lean mass as a percent of total body weight was similar in all mice. (**D**) Visceral fat was visibly increased in female GM-/- mice, compared to $GM^{+/+}$ control mice. (**E**) Weights of parametrial (PE), retroperitoneal (RE), and mesenteric (ME) fat pads were increased in female $GM^{-/-}$ mice compared to $GM^{+/+}$ control mice. (*$p<0.05$, n = 4, mean ±SEM) (**F**) NPY, AgRP, POMC, insulin receptor mRNA expression was similar and LepR expression was increased in $GM^{-/-}$ and $GM^{+/+}$ hypothalamus. (*$p<0.05$, n=8, mean ±SEM)

Supplemental Figure 5

Plasma insulin levels. Plasma insulin levels in (**A**) male and (**B**) female $GM^{-/-}$ mice did not differ significantly from those in sex-matched $GM^{+/+}$ controls. (n = 7 to 11)

Supplemental Figure 6

Post-fasting food intake and high- or low-fat diet intake. Following a 24 h fast, food intake during 24 h re-feeding period did not differ between $GM^{-/-}$ and $GM^{+/+}$ male (**A**) and female (**B**) mice. (n = 7 to 11)

Supplemental Figure 7

Effects of high and low fat diets. Male and female $GM^{-/-}$ and $GM^{+/+}$ mice were placed on low or high fat diets for a period of 5 weeks. Body weights in (**A**) male $GM^{-/-}$ mice were higher than in sex-matched $GM^{+/+}$ mice on either diet, while fat composition of the diets had little effect in (**B**) female $GM^{-/-}$ mice. (**C**) Body fat was increased proportionally in $GM^{-/-}$ and $GM^{+/+}$ males, while (**D**) $GM^{-/-}$ females had increased body fat independent of dietary fat content. $GM^{+/+}$ females on low and high fat diets had similar amounts of body fat. (**E**) Caloric intake was significantly increased in $GM^{+/+}$ and $GM^{-/-}$ male mice consuming a high fat diet, compared to a low fat diet. (**F**) $GM^{+/+}$ female mice consumed more calories on a high fat diet but $GM^{+/+}$, but caloric intake of $GM^{-/-}$ female groups did not differ significantly on low or high fat diets. (*$p<0.05$, n = 8 to 10, mean ±SEM)