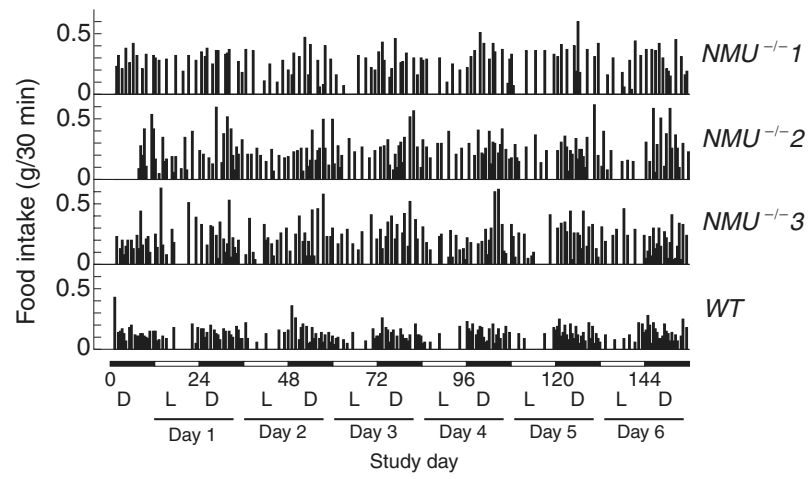
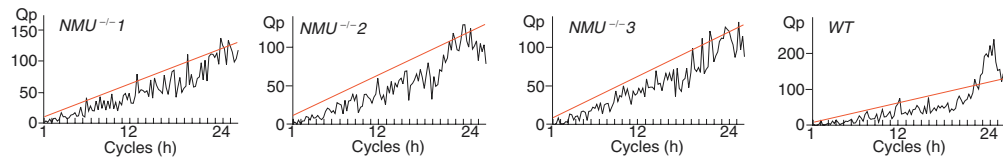


a



b



Supplementary Figure 3 Circadian phenotypes of feeding behavior in *NMU^{-/-}* mice and WT mouse. **(a)** Representative food intake of three *NMU^{-/-}* mice and one WT mouse housed under the same conditions. LD, 12 hr light/12 hr dark cycles. **(b)** χ^2 periodogram analyses of *NMU^{-/-}* mice and WT mouse. To determine the period length, 6-day intervals during which the circadian periods appeared to be stable with respect to the activity record were analyzed with a χ^2 periodogram analysis. All analysis clearly indicated the lack of a circadian rhythm of diurnal feeding in *NMU^{-/-}* mice, while WT mouse showed a clear rhythm with a 23.25-24.75 hr period. Red lines in the periodograms represent the statistical significance level ($P = 0.05$).