SUPPLEMENTAL FIG. 1 A. Average body weight of mice in Fig. 1A (n=18-20) (Left): Daily body weight over 2 weeks of experiment. (Right): Average weight over 2 weeks. B. Cumulative food intake rate after 24 hr fasting as calculated by normalizing each mouse’s intake to \([\text{body weight}]^{0.6667}\). The intake rate for \textit{Snord116del} mice at 60 min was 32±6% \((p<0.0005)\) higher than that of wild-type mice. C. Cumulative intake rate of at 8, 12 and 24 hrs after fasting. The intake rates for \textit{Snord116del} mice were 40±8% \((p<0.002)\), 49±8% \((p<0.0005)\), and 18±6% \((p<0.05)\) higher than those of wild-type mice at 8, 12, and 24 hrs, respectively.

SUPPLEMENTAL FIG. 2. A. Long term effect of 12 \(\mu\text{mol/kg}\) [D-Lys3]-GHRP6 on food intake of mice fed \textit{ad libitum}. The mice were injected with PBS for 5 days, followed by daily injection of 12 \(\mu\text{mol/kg}\) [D-Lys3]-GHRP6 at the onset of dark phase for 6 days (D1 to D6). The food intake rates during dark (black bar) and light (grey bar) phases were plotted (n=8-9 for each genotype). B. Long term effect of 4.5 \(\mu\text{mol/kg}\) SPA on food intake of mice fed \textit{ad libitum}. The mice were injected with PBS for 5 days, followed by daily injection of 4.5 \(\mu\text{mol/kg}\) SPA at the onset of dark phase for 6 days (S1 to S6). The food intake levels during dark (black bar) and light (grey bar) phases were plotted (n=8-9 for each genotype).

C. Cumulative hourly intake rate of 24hr fasted mice after receiving oral delivery of 0, 67 or 134 \(\mu\text{mol/kg}\) YIL-781 (n=9 for each dose and genotype). (Left) wild-type; (right) \textit{Snord116del} mice. Asterisk, \(p<0.05\) for highest dose in comparison to those receiving solvent only (0).

SUPPLEMENTAL FIG. 3 A. Intake rates of mice with daily injection of 12 \(\mu\text{g/kg}\) exenatide. “0”, mice with twice daily injection of PBS prior to exenatide treatment. “R1-R4”, mice recovered for 4 days with
daily injection of PBS after exenatide treatment. The dashed lines represent normal food intake of wild-type and Snord116del mice (n=10-12).

B. Intake rates of mice with daily injection of 24 μg/kg exenatide (n=9-11).

C. Cumulative hourly intake levels after injection with 12 μg/kg exenatide in comparison to their normal levels (p<0.0005 for genotype as analyzed by 2-way ANOVA of time and genotype) (Left), and intake during 0-6hr, 7-12hr and light phase after injection (n=10-12). “0”, mice with daily injection of PBS prior to exenatide treatment; “Ex”, mice injected with exenatide (Right). “*” and “**”, significant decrease (p<0.05 and p<0.001, respectively). “#”, significant increase (p<0.05).

D. Cumulative hourly intake rates (Left) and intake rates during 0-6hr, 7-12hr and light phase (Right) after injection of 24 μg/kg exenatide (n=9-11).

E. Cumulative hourly intake rates (Left) and intake rates during 0-6hr, 7-12hr and light phase (Right) after injection of 48 μg/kg exenatide (n=10-12).

F. Daily food intake for mice receiving twice daily injection of 24 μg/kg exenatide. “0”, mice with twice daily injection of PBS prior to exenatide treatment. “R1-R7”, mice recovered with daily injection of PBS after exenatide treatment. The dashed lines represent normal food intake of wild-type and Snord116del mice (n=10-12).

G. Body weight of mice in F.

SUPPLEMENTAL FIG. 4. A and B. Blood glucose levels in fasted (A) or fed (B) mice after exenatide injection. N, no injection; PBS, PBS injection; Ex, 24 μg/kg exenatide injection (n=8-12 for each group).

C. Daily food intake of ghrelin−/− mice with daily injection of 12 μg/kg exenatide in comparison to their levels before treatment. “0”, mice with twice daily injection of PBS prior to exenatide treatment. “R1-R4”, mice recovered for 4 days with twice daily injection of PBS after exenatide treatment (n=6-10).