



**Figure 1 – Figure Supplement 1. Prestimulation of AgRP neurons primes feeding.** (A-B) 60 min food intake of (A) AgRP-ChR2 (n=5) and (B) WT control (n=4) mice in trials conducted in consecutive days. (C) Analysis of 60 min food intake of AgRP-ChR2 (n=5) and WT control (n=4) mice under different stimulation condition. Asterisks indicate significance level for comparison between WT and AgRP-ChR2 animals subjected to same stimulation protocol. ns, not significant. (D) Average 60 min food intake evoked by prestimulation with varied temporal structure of laser pulses (n=8). Asterisks on top of bar plots indicate significance levels compared to no stimulation control and asterisks on top of brackets indicate significance levels for comparisons with the respective protocols, using one-way-ANOVA with Holm-Sidak's correction for multiple comparisons (\*\*\*\*p≤0.0001, \*\*\*0.0001<p≤0.001, \*\*0.001<p≤0.01, \*0.01<p≤0.05, ns p>0.05).