Figure S1. Beta-band power changes are representative across the largest proportion of channels and observed largely in the STN, corresponding to a posterior and inferior focus. (A) Proportion of anticipation- (left) and receipt-responsive (right) channels (total N channels=40), with significant responses defined by cluster-based permutation, in each frequency-band range. Frequency bands analyzed along x-axis include delta (δ), theta (θ), alpha (α), beta (β), low gamma (γ<sub>low</sub>), and high gamma (γ<sub>high</sub>). (A top bar) Proportion of participants (N=5) with at least 1 anticipation- (left) or receipt-responsive (right) channel. During anticipation, beta-band activity changes had the largest representation of responsive channels observed in 4 of the 5 (80%) of participants. (B) Proportion of anticipation- (left) and receipt-responsive (right) channels (total N responsive channels=17 and 7 of a total of 40, respectively), with significant responses defined by cluster-based permutation, in each region of the subthalamic area. (C) Positions of contacts in the STN, SN, and ZI with decreased beta-band power responses vs non-responsive contact by coordinates in MNI space along each axis. Decreased beta-band power responses were more distributed in the ventro-posterior aspect of the recorded subthalamic area (FDR-adjusted p < 0.05). (D) Positions of ZI contacts with increased vs decreased beta-band power responses by coordinates in MNI space along each axis. Decreased beta-band power responses were more distributed in the lateral and superior aspects of the recorded ZI (FDR-adjusted p < 0.05). *FDR-adjusted p < 0.05 on one-way ANOVA
Figure S2. Beta-band activity time-locked to button press highlights presence of additional anticipatory processing. (A) Beta-band power tracing (top) from all channels (N=40) with trials time-locked to taste-cue (block) and button press (grey) demonstrates decreased beta-power within a 1 second period around both triggers (cluster-based permutation testing, p< 0.05). (B) Beta-band responses to trials time-locked to the taste cue (left) and button press (right) demonstrating similar patterns of beta-band power decrease followed by rebound for sweet-fat (brown) and taste-neutral (blue) stimuli during anticipation. (C) Average beta-band power within a 1-second period around trials time-locked to the taste-cue (black) and button-press (grey) triggers shows greater magnitude decrease for taste-cue triggered trials. (D) Average beta-band power within the beta-band rebound period for the sweet-fat (left) and taste-neutral (blue) cues with trials time-locked to the taste-cue (black) and button press (gray). Beta-band power is more suppressed for the sweet-fat taste and has a larger rebound for the taste-neutral cue when trials are time-locked to the taste-cue vs button-press. For A-B, *p < 0.05 on cluster-based permutation testing. For C-D, *FDR-adjusted p < 0.05 on one-way ANOVA