



*Figure S4.* Average responses from the unitary ratings task in which listeners were asked to provide a rating, on a scale of 0 to 10, of how well the sound conveyed a bouncing event, and separately, how it conveyed a rolling event. The graph depicts the average proportion of roll ratings [1 refers to a rating of 10 on the 'roll' scale] as a function of the number of impulses in the sound. Standard error of the mean across participants is represented by the error bars at each data point.