

Does device matter? Impacts of food-specific inhibition training on food choice, liking and approach bias when delivered by smartphone or computer

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Food-specific inhibition training (FSIT) requires users to inhibit responses to energy-dense (ED) food stimuli within a reaction time game. FSIT reduces choice and liking of ED foods. Research with the public shows larger effects when FSIT is delivered by computer versus smartphone. This pre-registered study is the first to compare computer-FSIT versus smartphone-FSIT in a controlled setting. Three-hundred-and-thirty-one adults were randomised to computer-FSIT, smartphone-FSIT or non-food control training (computer-delivered). In session 1, participants completed baseline measures of impulsive food choice, food approach bias (approach/avoid implicit association test), and food liking ratings, before completing eight minutes of FSIT/control training. In session 2, participants repeated the same training task, followed by the same measures of food choice, approach bias and liking. We hypothesised that FSIT groups would show healthier food choices, lower ED food liking, and reduced ED food approach bias at post-training compared to control. We expected no statistically significant differences between the two FSIT groups. Post-exclusions, data for 259 participants was analysed. Contrary to predictions, there was no evidence of significant group differences on any of the outcome measures. Baseline measures suggest participants already showed high approach to healthy foods, which may explain these null results.