

Randomized Pilot Study Examining the Impact of an Online, Non-restrictive Diet Among Working Adults

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ABSTRACT

There is a growing interest in health promotion emphasizing diet quality, specifically increased intake of fruits and vegetables, as a more effective approach for improving health outcomes. Recent studies examined ways to decrease fatigue in the workplace, some showing improved diet quality helps performance in the work environment. **PURPOSE:** This randomized pilot study aimed to test an online, non-restrictive diet among a sample of full-time employees at the University of North Texas. The primary research question asked if the diet program improved general health indicators: body fat percentage (BF%), body weight, and waist circumference (WC). **METHODS:** Twenty-three participants were randomized to complete an 8-week diet program using an online application or to receive the diet program after an 8-week waiting period (wait-list control). The online program included a daily fruit and vegetable target, 4 weeks educational content, and a leaderboard displaying points for meeting the daily tasks. Participants were to complete 2 study visits (Baseline and 8 Weeks). During each visit, participants were asked to complete a standard Bioelectrical Impedance Analysis (BIA) protocol and measurement of WC at the umbilicus. Independent samples t-tests were used to assess group difference in change in BF%, body weight, and WC following the 8-week intervention. **RESULTS:** Fourteen participants were randomized to the intervention group and 13 to the waitlist control group. The mean age among participants was 44.8±13.6 years, 65% identified as female biological sex, 74% had a master's degree or more, and 74% identified as Caucasian. Results from independent t-tests indicated a small significant difference in BF% change ($t(21) = 0.36, p = .049$) and no significant change in body weight or WC. **CONCLUSION:** Results from this pilot study indicated some positive impact of an 8-week non-restrictive diet on BF%, which warrants further investigation in a larger, representative sample. Future research is needed examining biomarkers and psychosocial outcomes as non-restrictive approaches to diet often do not yield significant weight loss, but other benefits related to improved diet quality such as lower cholesterol or stress.