Report on the Study of the Effect of MealEnders on Food Intake in Adults
Stanford School of Medicine | Nutrition Studies Group

Abstract

Introduction: Techniques to change eating behaviors and increase mindfulness are currently at the forefront of weight control research. The MealEnders lozenge aims to address the behavioral, sensory and psychological aspects of changing eating habits. The purpose of this study was to examine the effectiveness of the MealEnders product on decreasing calorie intake by assisting with portion control and reducing snacking. The primary measure was caloric intake as self-reported by study participants and evaluated by the research team. Secondary outcomes examined eating habits and eating behaviors as measured by validated questionnaires.

Study Design: The study had three phases during a four-week period. The first phase was a weeklong baseline measurement period, then two weeks where participants used the MealEnders lozenge, followed by a week of not using the product to measure any residual influence of the product. Healthy overweight (BMI=27-40 kg/m²) participants 18 years and older were enrolled, with no exclusions for gender, race or ethnicity. All participants wanted to lose weight, were looking for assistance in weight control/management, and hoped to get better control of their appetites and eating habits.

Results: Forty-two participants received the MealEnders product, and 34 of them completed the study with high adherence. During the two-week intervention, study participants who used the MealEnders product reported consuming 231kcal fewer per day relative to their pre-study consumption (p value = 0.02). Most of that calorie decrease was from reductions in snacking and unhealthy deserts. According to self-reported questionnaires, participants seemed to be more mindful and more thoughtful in their eating habits by the end of the study. Also, study participants maintained a similar reported reduction in calorie intake during the week that immediately followed their use of the MealEnders lozenge.

Conclusions: Study participants reported consuming significantly fewer calories while using the MealEnders product—a ~12% reduction relative to pre-study levels—suggesting that this can be a beneficial addition to weight management efforts. Trends in the data suggest, that despite reporting lower calorie intake, participants did not feel hungry or deprived. Based on the reported sustained decrease in caloric intake, MealEnders may have an enduring effect on modifying eating behavior.