Simple, personalized behavioral interventions as a means to modify diet quality in college students: A randomized intervention

Submission date 19/08/2022	Recruitment status No longer recruiting	[X] Prospectively registered [] Protocol
Registration date	-	Statistical analysis plan
24/08/2022		[X] Results
Last Edited 25/06/2025	Condition category Other	Individual participant data

Plain English summary of protocol

Background and study aims

Diet is an important factor necessary for good health. College students are typically healthy, but they often struggle to maintain a good diet once they arrive at their college. The purpose of this research study is to determine if having college students select simple dietary behavior changes for themselves can successfully improve the quality of their diets, compared to just receiving general advice.

Who can participate?

Students will be eligible to participate in this study if 18 to 25 years of age, enrolled full time as a student of your university, fluent in English, do not have any medical conditions or allergies that require modification of diet, or struggle with disordered eating practices.

What does the study involve?

If eligible, participants will complete initial surveys and two diet recalls within a week's time, with help from members of the research team. After completing these initial surveys, participants will be assigned to participate in either the experimental or control group. In the experimental group, participants will be shown a list of seven simple dietary behaviors and asked to select the two behaviors they would most like to follow for the next four weeks. They will then receive a laminated card for each chosen behavior which are then attached to their key chain and carried for the next four weeks as a reminder of their selected dietary behaviors. They may also receive reminder text messages each week from the research team. The control group will receive a link to the current Dietary Guidelines for Americans and asked to consider these guidelines in relation to their diet. Those in the control group will not receive laminated cards or specific instructions on dietary behaviors. After four weeks have passed, all participants will again complete two dietary recalls within a week's time frame. At this point the study is considered over, but after four more weeks have passed, participants will again be contacted to complete two final dietary recalls as well as close out surveys similar to what they completed in the beginning.

All study procedures will occur virtually over 9 weeks. The time required to complete all surveys will be approximately 2 hours and 40 minutes when spread out over the study period. The study will be conducted remotely, with the research team located on campus at UCI.

What are the possible benefits and risks of participating?

Possible benefits participants may experience from the procedures described in this study include becoming more informed about how to improve diet quality. Possible risks and discomforts associated with the study include: anticipated discomfort with answering questions about one's personal life, including finances and dietary practices. In addition, participants will be providing information about their diet, and this may cause some anxiety for feeling judged or experiencing negative feelings regarding the quality of their diet. Furthermore, participants will be asked to perform specific behaviors that some may consider to be cumbersome or a burden in light of student-related duties.

Where is the study run from? University of California, Irvine (USA)

When is the study starting and how long is it expected to run for? July 2022 to April 2023

Who is funding the study? Investigator initiated and funded

Who is the main contact? Dustin Moore, dustinmm@uci.edu

Contact information

Type(s) Principal Investigator

Contact name Mr Dustin Moore

Contact details 9210 Via Balboa Circle Buena Park United States of America 90620 +1 8056572757 dustinmm@uci.edu

Additional identifiers

EudraCT/CTIS number Nil known

IRAS number

ClinicalTrials.gov number

Nil known

Secondary identifying numbers

Nil known

Study information

Scientific Title

Personalized intention tags selected by college students, and meant to be attached to the students keys, with a four week trial period to observe if diet quality will improve, compared to general nutrition information provided to a control group of similar college students.

Acronym

SMPLDIET

Study objectives

The aim of the randomized controlled trial among college students is to evaluate whether or not simple, behavioral intention statements that are selected by the students and carried as keychain tags can result in improved diet quality, compared to general nutrition advice.

Ethics approval required

Old ethics approval format

Ethics approval(s)

Approved 18/07/2022, University of California Irvine Institutional Review Board (Office of Research, 160 Aldrich Hall, Irvine, CA, 92697-7600, USA; +1 949-824-6662; cshindle@uci.edu), ref: UCI IRB #963

Study design Multicenter interventional randomized controlled trial

Primary study design Interventional

Interventional

Secondary study design Randomised controlled trial

Study setting(s) Other

Study type(s) Quality of life

Participant information sheet See additional files

Health condition(s) or problem(s) studied Diet quality among college students

Interventions

One group of students will be given a list of simple behavior change interventions, and asked to select two, which they will adhere to for the duration of the study. These selected behavior changes will be printed out onto laminate tags and given to students with the intention to be placed on their keys. The second group will be given a link and guide to MyPlate and the Dietary Guidelines for Americans, which they will also be asked to read without specific dietary guidance. Both groups will complete baseline and follow-up surveys that collect information on demographics, current stress levels, willingness to change behavior, and diet quality, with the principal outcome being how the intervention affects diet quality. The intervention will run for a duration of four weeks, with an additional follow-up at eight weeks from baseline. The control arm of the study will be undergo data collection procedures at the same time points.

Randomization:

Using the NIH NCI Clinical Trial Randomization Tool (https://ctrandomization.cancer.gov/home/). This generated a randomized list of allocations. As participants are recruited and deemed eligible, they will be sequentially assigned the allocation determined by this list.

Intervention Type

Mixed

Primary outcome measure

Diet quality as measured by the Healthy Eating Index 2015, using data collected from the Automated Self-Administered 24-hour Dietary Assessment Tool at baseline, week 4, and week 8

Secondary outcome measures

Feasibility will be assessed using a 7 question Likert scale survey developed by the researchers at week 8.

Overall study start date

18/07/2022

Completion date

15/04/2023

Eligibility

Key inclusion criteria

1. Between the ages of 18 and 25 years

2. Fluent in English

3. Enrolled full time at a university as a student.

Participant type(s)

Healthy volunteer

Age group Adult

Lower age limit

18 Years

Sex

Both

Target number of participants 150

Total final enrolment 131

Key exclusion criteria

- 1. Those with severe food allergies, medical conditions that require dietary modification
- 2. Those at risk for disordered eating or eating disorders
- 3. Those considered to already have a high diet quality in line with dietary recommendations

Date of first enrolment 29/08/2022

Date of final enrolment 31/03/2023

Locations

Countries of recruitment

United States of America

Study participating centre University of California, Irvine Irvine United States of America 92697

Study participating centre California State University, Long Beach 1250 Bellflower Blvd Long Beach United States of America 90840

Sponsor information

Organisation University of California, Irvine

Sponsor details

653 E Peltason Drive Irvine United States of America 92697 +1 (949) 824-6207 ebakou@uci.edu

Sponsor type University/education

Website https://publichealth.uci.edu/ph/_contact/administration

ROR https://ror.org/04gyf1771

Funder(s)

Funder type Other

Funder Name Investigator initiated and funded

Results and Publications

Publication and dissemination plan

Once the manuscript has been written at the conclusion of the study, we plan to submit the paper for publication at a journal that focuses on college student health or nutrition-related education practices.

Intention to publish date

01/02/2024

Individual participant data (IPD) sharing plan

The datasets generated during and/or analyzed during the current study will be stored in a nonpublicly available repository, but at a later point may become available if requested. This will be a password protected repository through the school public health at UC Irvine, with access given to only members of the research team, for the purpose of analyzing the data for publication.

IPD sharing plan summary

Stored in non-publicly available repository, Available on request

Study outputs

Output type

Participant information sheet	01/03/2021	23/08/2022	No	Yes
Results article	22/05/2025	25/06/2025	Yes	No