Development of a Theory-Based 3-Week Whole Food Plant-Based Diet Intervention for College Students
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INTRODUCTION
Research has demonstrated that college students form unhealthy dietary habits that persist into adulthood and increase risk for chronic diseases. Eating a whole-food plant-based (WFPB) diet is one health behavior that has been shown to prevent, manage, and even reverse chronic conditions, including mental disorders, and improve diet quality in some populations but not college students.

OBJECTIVE
Research Question: Will a WFPB vegan diet intervention (i.e. interactive, experiential (IE) education versus lecture-based (LB) education) make a difference in health outcomes, diet quality, and adherence among undergraduate college students at Appalachian State University?

Objectives:
1. To develop a 3-week, theory-based, WFPB diet intervention for use in a feasibility study to assess the impact of a WFPB diet on college students' physical and mental health.
2. To determine if the type of teaching modality (i.e. interactive-experiential vs. lecture-based) improves diet adherence and health outcomes.

METHODS
Study Participants
The target population was actively enrolled undergraduate college students at Appalachian State University. The target sample size was 60 participants (20 per group). Eligible participants were 18-25 years old and enrolled as undergraduate students at Appalachian State University. Participants were excluded if they were younger than 18 years or older than 25 years; already following a strict WFPB diet; reported a chronic/serious physical or mental health condition or food, latex or other chemical allergy/intolerance; had a current eating disorder; had an active substance use disorder; were participating in a weight loss program/taking a weight loss medication; were currently pregnant/breastfeeding; had a needle/finger stick phobia; or were unable or unwilling to participate in all study sessions.

Study Design
The study design was a randomized controlled trial. Theory of Planned Behavior (TPB) and Social-Cognitive Theory (SCT) were used to develop the theoretical model and supporting materials for three 75-minute intervention sessions that were delivered using two different teaching modalities. Determinants of healthy eating and adherence to plant-based diets among college students were summarized to identify three major topics for the intervention sessions: 1) A Beginner’s Guide to Whole Food Plant Based Eating, 2) Meal Planning and Shopping for WFPB Eating, and 3) Eating WFPB Eating When Dining Out and in Social Situations.

THEORETICAL MODEL
Testing the Feasibility and Impact of a Whole-food Plant-based Diet Intervention on College Students’ Physical and Mental Health: Theoretical Model

EVALUATION METHODS
Pre- and/or post-intervention measures include socio-demographic data, diet quality and adherence, theoretically-informed mediators, depression and anxiety symptoms, anthropometric and biochemical measurements, and acceptability of a WFPB diet. We hypothesize that greater adherence to a WFPB diet will result in improved mental health, biochemical and anthropometric measures, and diet quality and participants in the interactive-experiential group will report better diet quality/adherence. A post intervention focus group is planned.

RESULTS
A comprehensive model of eight constructs from the TPB and SCT was developed as well as three, 75-minute intervention sessions. The intervention sessions were completed in a pilot feasibility study in April 2023. Data analysis is underway at this time.

DISCUSSION
We extended the research on WFPB eating and health by testing the impacts of this diet in college students. Findings will provide the groundwork for a larger study. Post-intervention focus groups will be utilized to inform revisions to the intervention sessions.

REFERENCES

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