

The Transformation of Views and Knowledge of Plant-Based Diets of University Students Throughout the Course of Education and Exposure

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Background

- Research indicates individuals who follow vegan/plant-based diets make healthier food choices and have less chronic disease than those consuming the Standard American Diet (SAD). It is hypothesized that Texas Christian University (TCU) students have limited knowledge and/or exposure to vegan and/or plant-based lifestyles and diets.
- Compared to the SAD, the average American diet includes excess consumptions of calories from refined carbohydrates, fatty meats, added fats, and it lacks nutrients from whole grains, vegetables, and fruits.

Purpose

To determine if a correlation exists between knowledge, attitudes, and beliefs about vegan/plant-based diets among university students and the amount of exposure to vegan/plant-based diets through education and exposure in a three-credit hour Nutritional Sciences (NTDT) course.



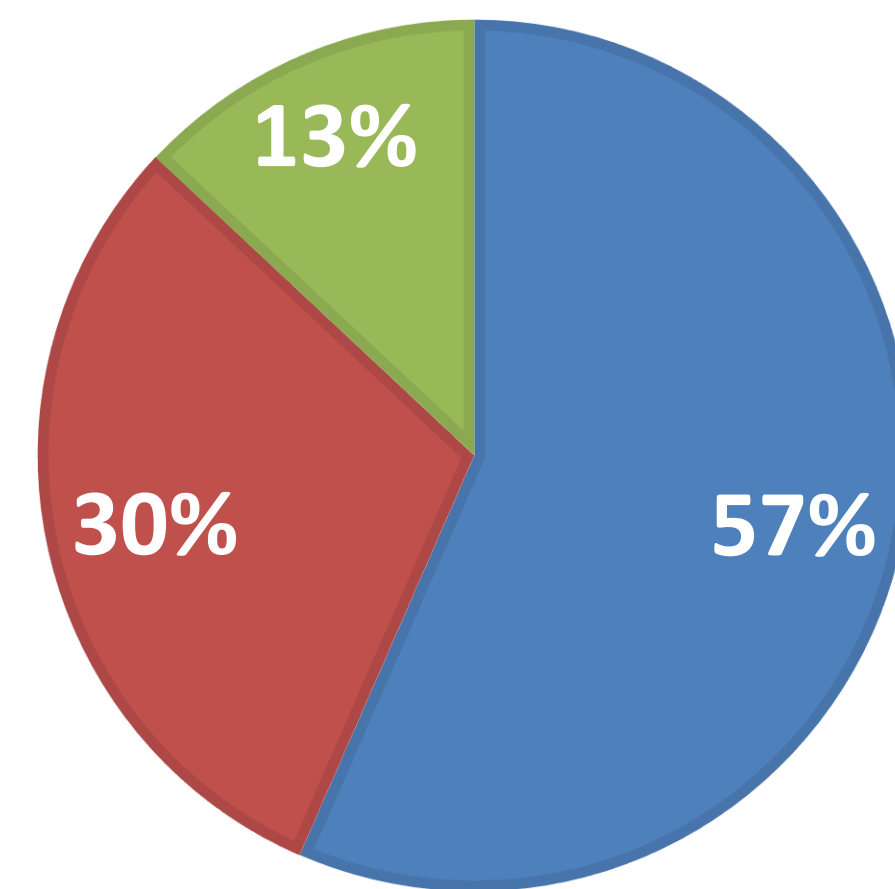
Methods

- Subjects included 23 junior/senior multi-disciplinary TCU students (56%female; 44%male) enrolled in a course about vegan/plant-based diets and lifestyles.
- Students completed a pre-assessment questionnaire on the first day of class before exposure to any content regarding vegan/plant-based diets and lifestyles. Students also completed a post-assessment questionnaire at semester end to ascertain if changes in attitudes, knowledge, and beliefs regarding vegan/plant-based diets and lifestyles changed over time with exposure and newly-gained subject knowledge in the course. Data was analyzed using SPSS ($p \leq 0.05$).

Vegans are Healthier and at Lower Risk for Chronic Disease than Individuals who Consume Animal Products

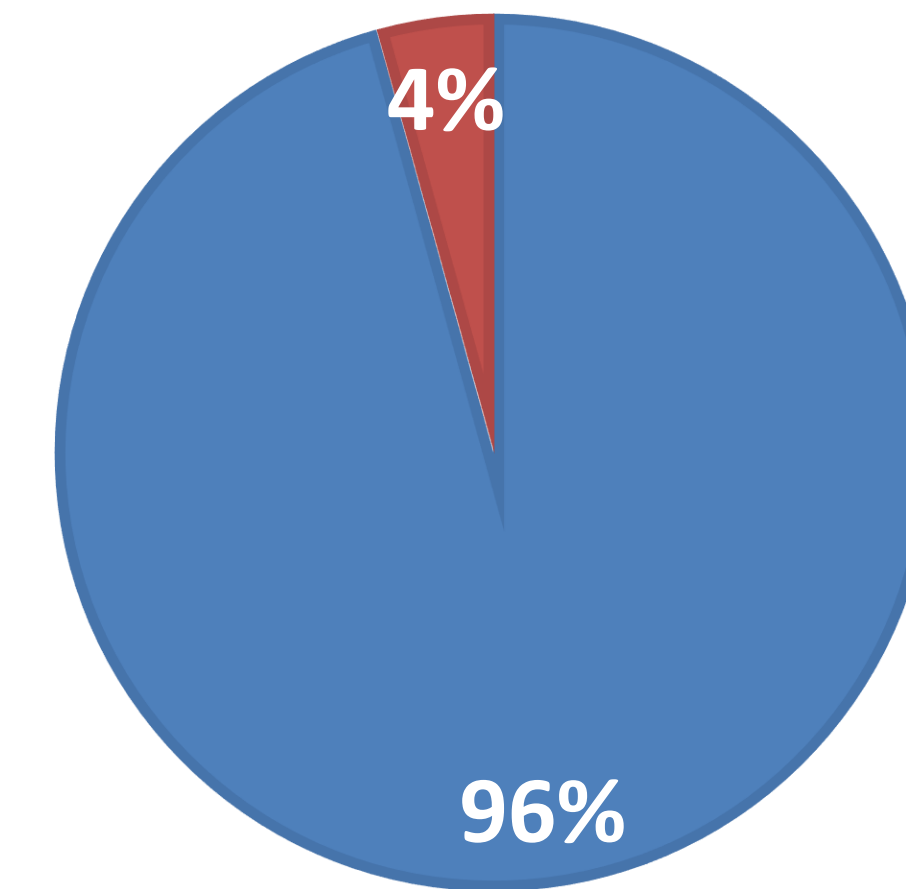
PRE-ASSESSMENT

■ Yes ■ No ■ Uncertain



POST-ASSESSMENT

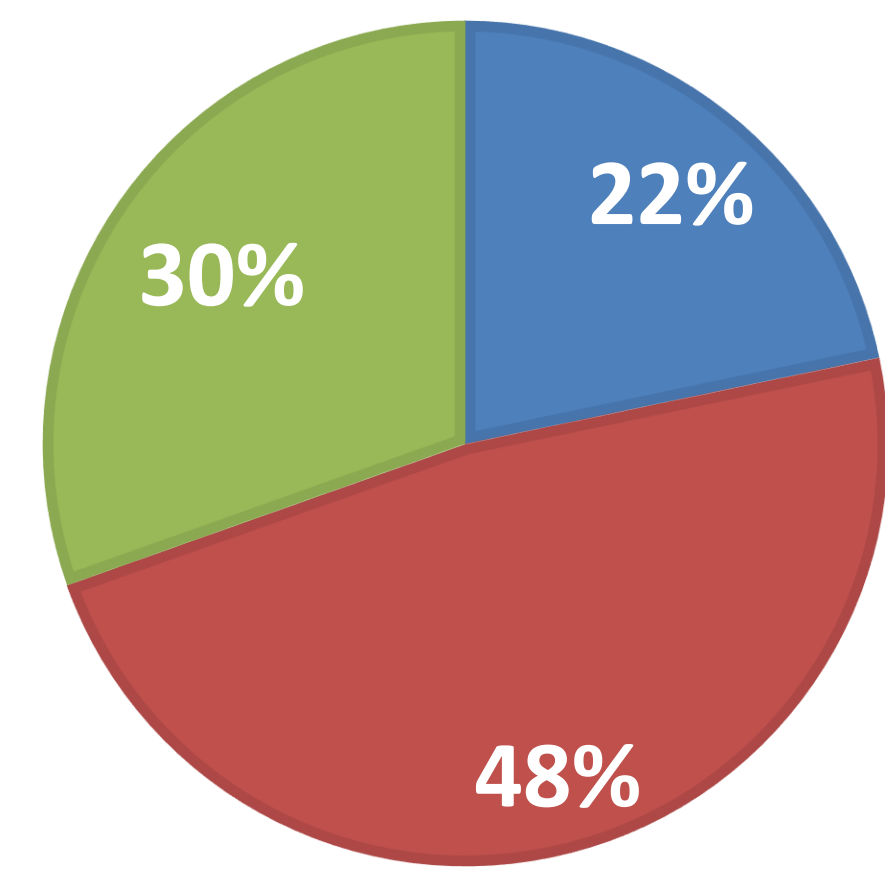
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Grocery Stores Provide a Good Range of Ready-to-Eat Foods/Meals for Vegans

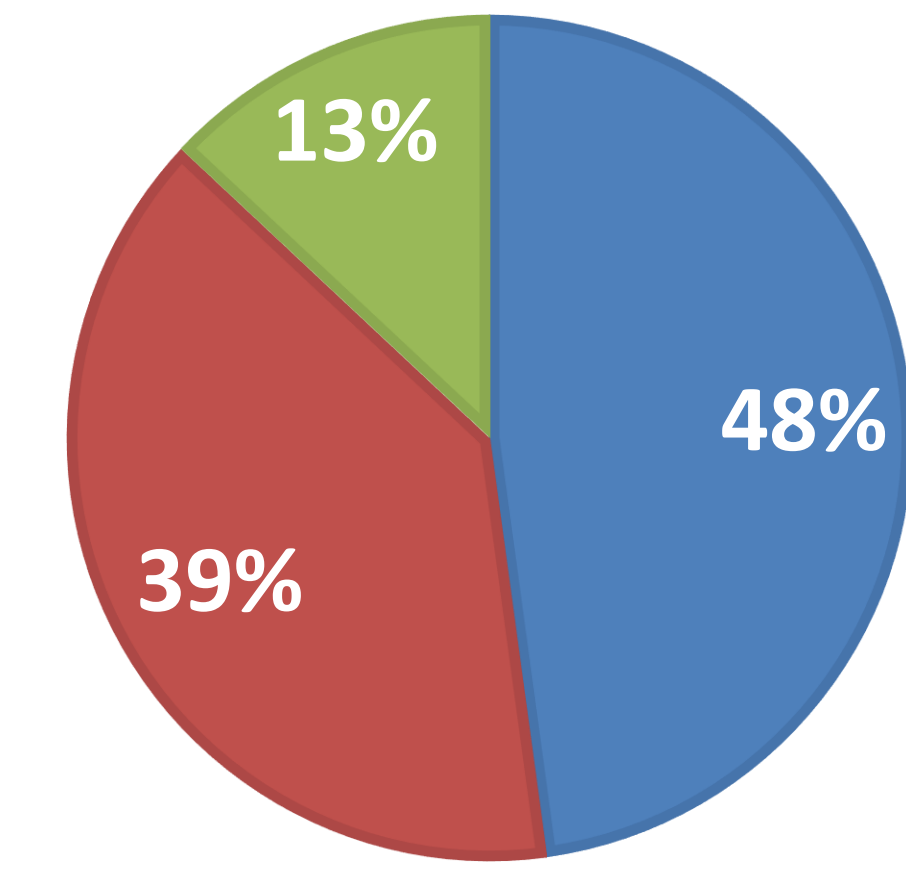
PRE-ASSESSMENT

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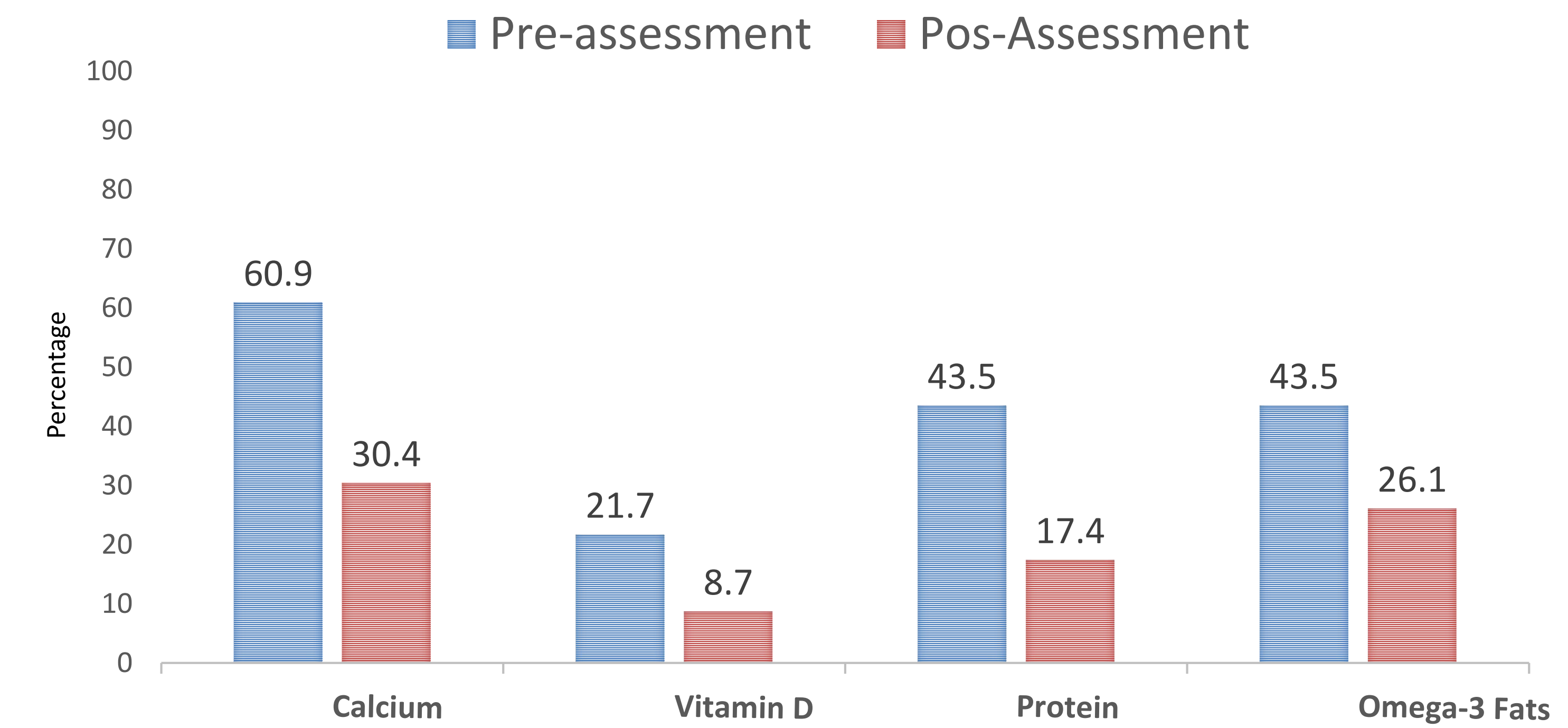


POST-ASSESSMENT

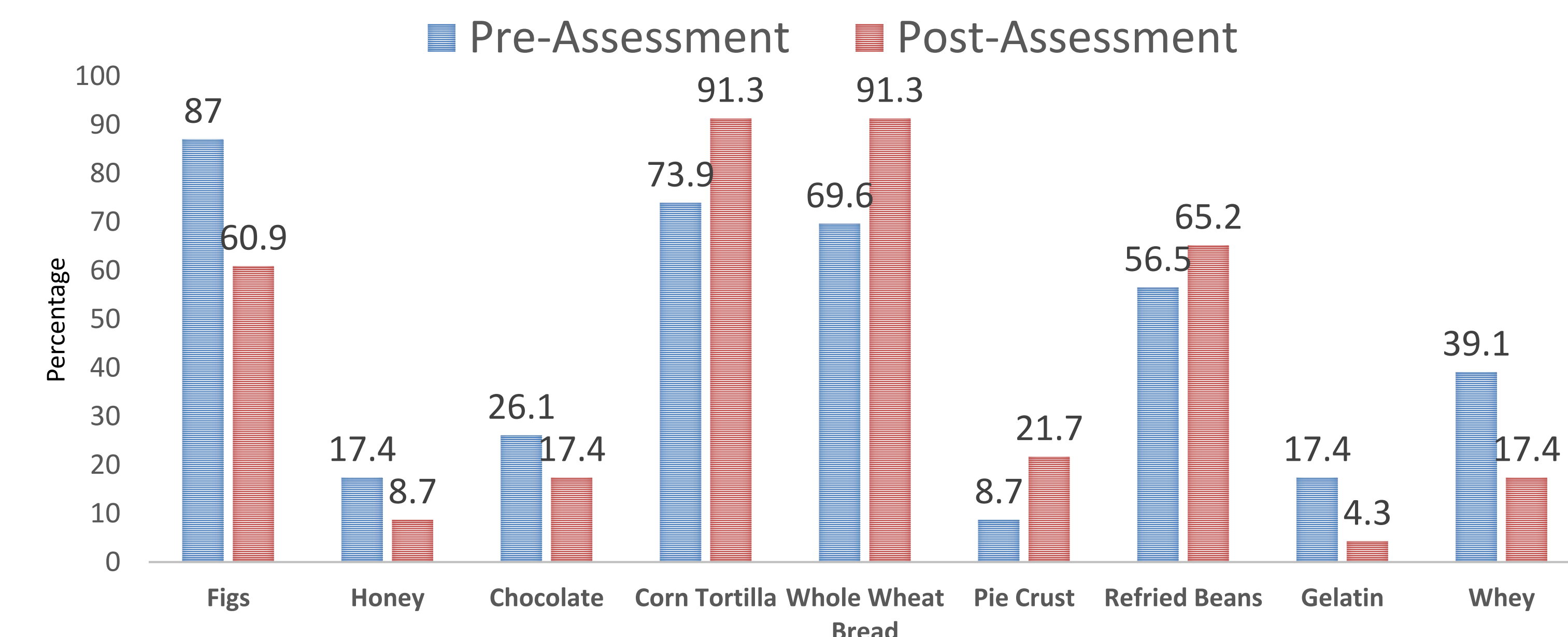
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Nutrient Deficiencies Identified in Vegans by Students Enrolled in a Plant-Base NTDT Course



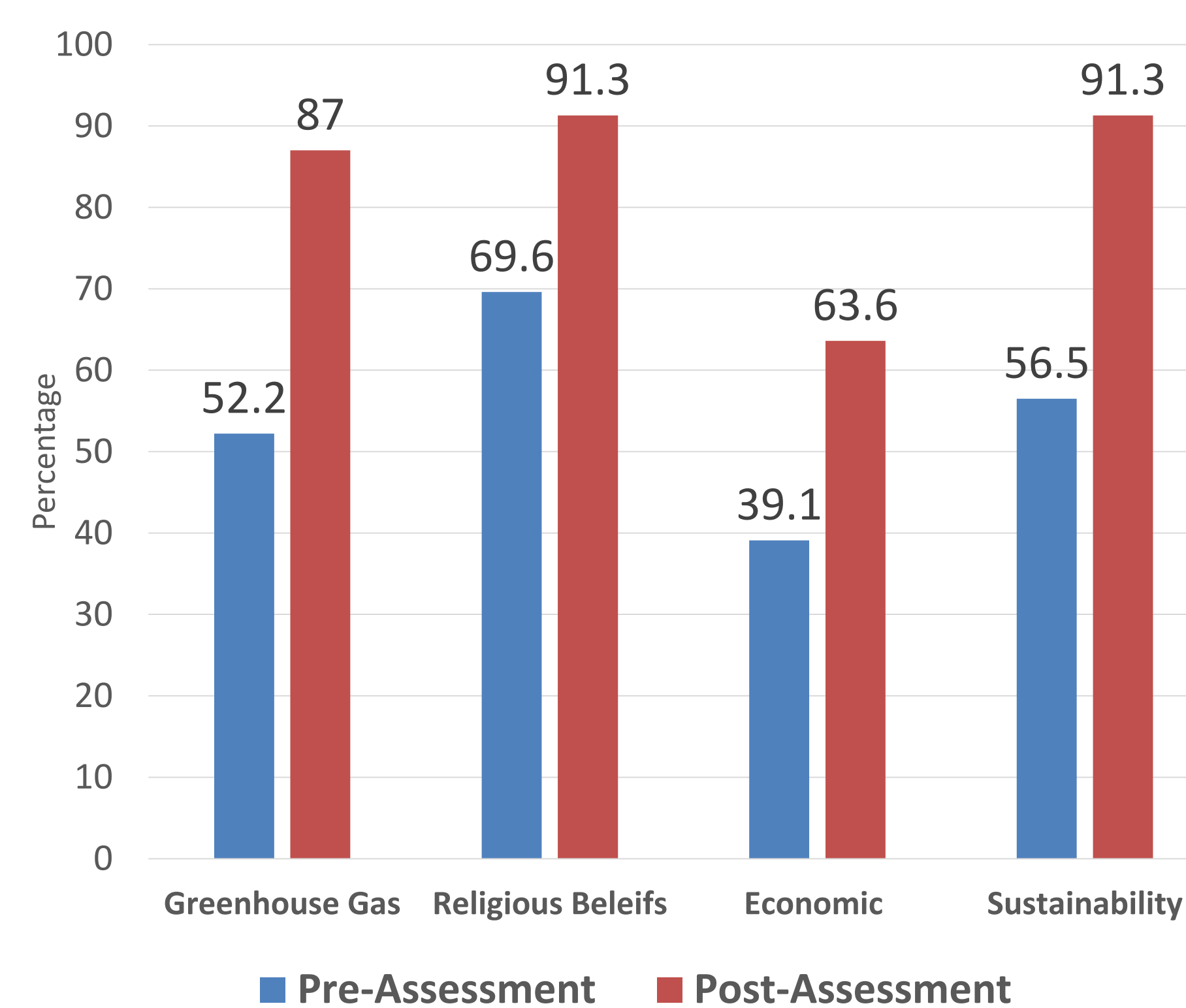
Acceptable Vegan Foods Identified by Student Enrolled in a Plant-based NTDT Course



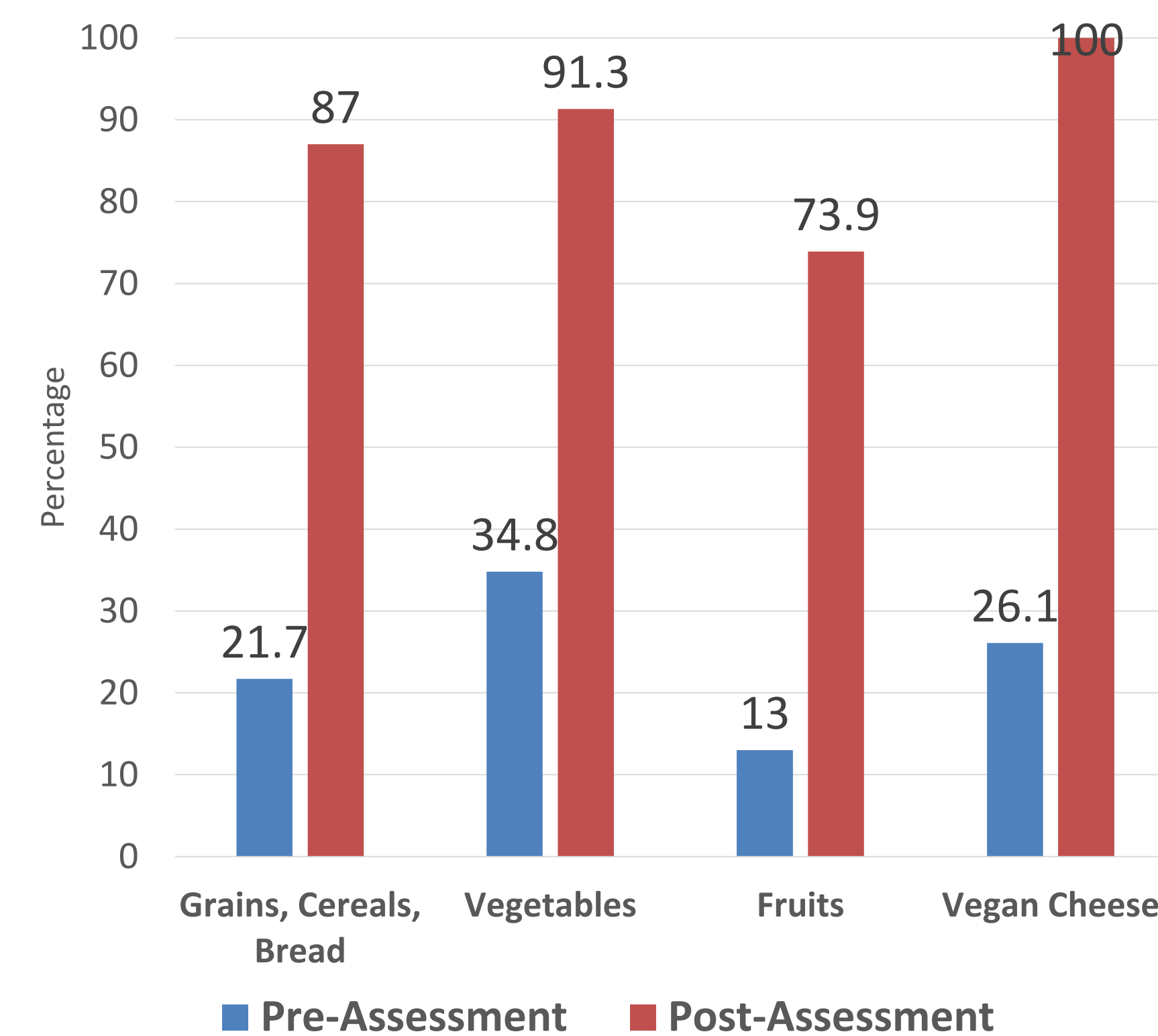
Results

- Prior to starting the course, 13% (3/23) of students reported they were vegetarians, and 83% (19/23) typically consumed animal protein in their diets ($p=0.01$). More students majoring in health-related disciplines noted having friends/family members who followed vegan diets ($p=0.01$). Pre-assessment results indicated that female students were more knowledgeable than male students about plant-based diets/veganism ($p=0.01$); whereas, post-assessment knowledge scores showed no differences between genders.
- Overall, post-assessment scores showed statistically significant improvement for all students in the following categories: reasons why people choose veganism, acceptable foods for vegans, nutrient deficiencies at risk for vegans, availability of vegan ready-to-eat foods/grocery store and restaurant meals, and risk for chronic disease of vegans vs. individuals who consume animal products ($p=0.01$).

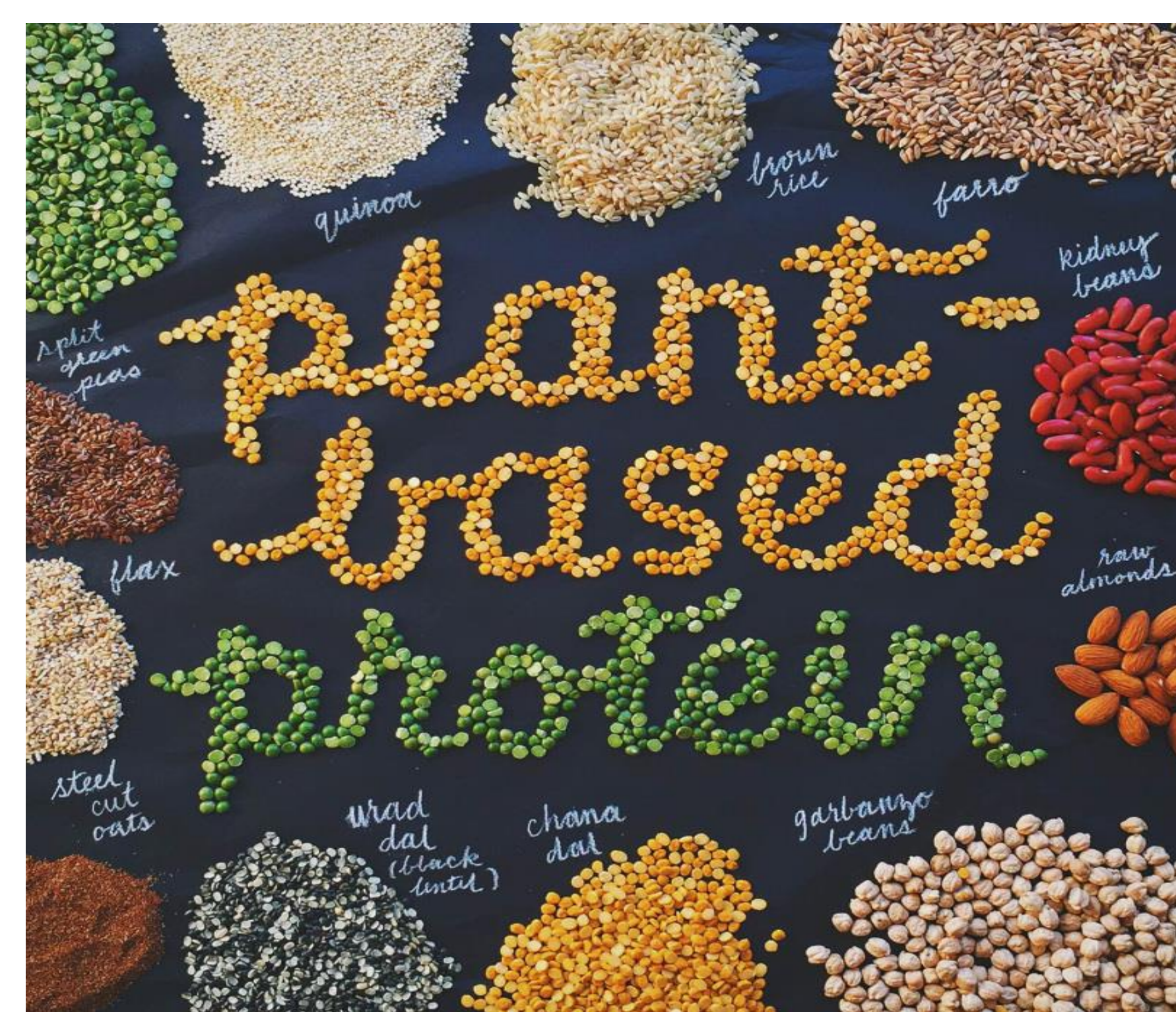
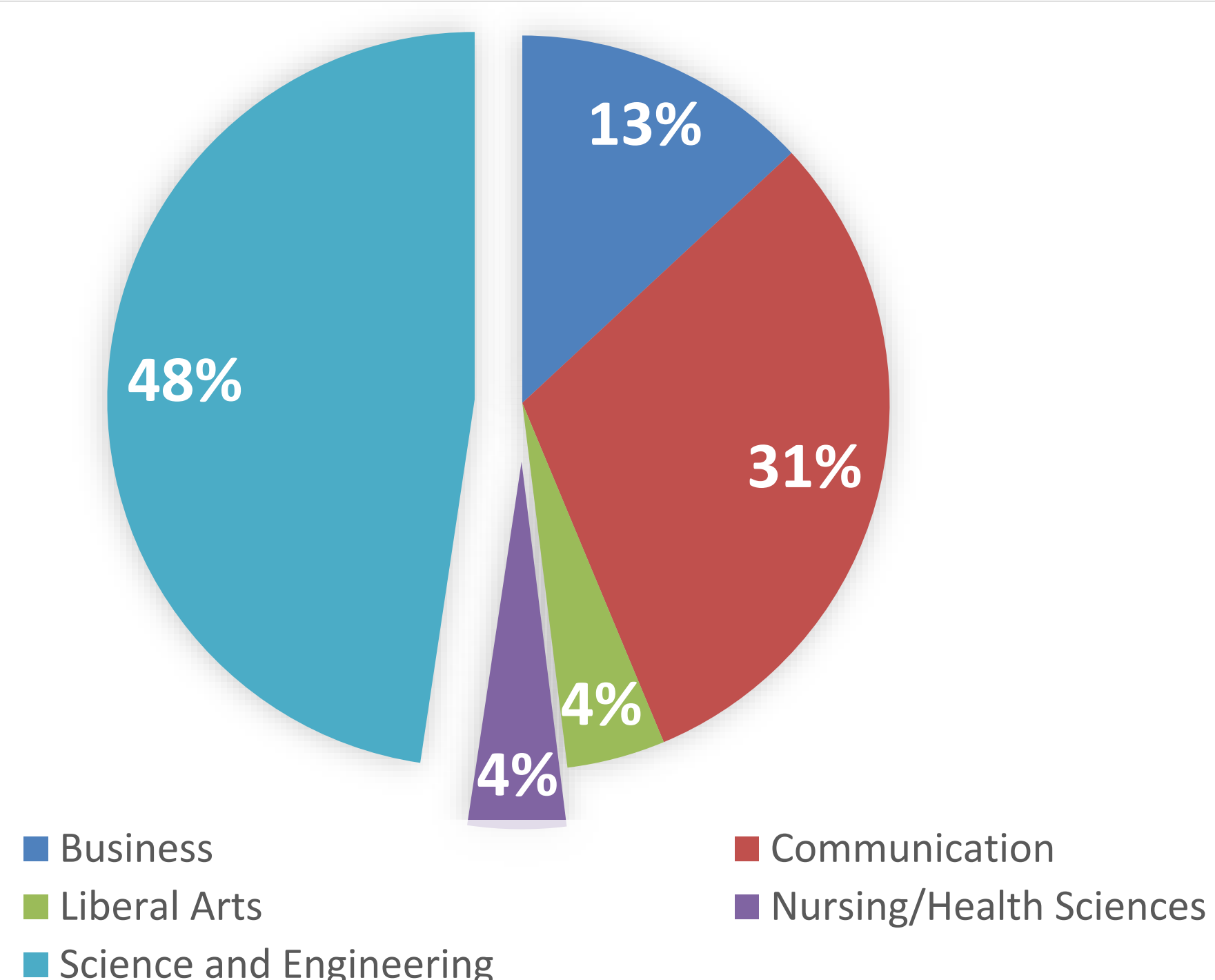
Reasons Individuals Choose a Plant-Based Lifestyle



Foods that Provide Protein in the Diet of Vegans



College Major of Participants



Discussion

- Students majoring in the sciences and nursing/health sciences possessed greater knowledge about vegan/plant-based diets/lifestyles than their counterparts majoring in other subjects.
- Although level of prior knowledge varied among all students, exposure to the topic through a vegan/plant-based studies course increased knowledge of participants. Individuals enrolled in the NTDT course had prior misconceptions about plant based and vegan diets that were corrected throughout the duration of the course with new knowledge and exposure to the subject.
- As the principle investigators of this study, we believe that increasing the amounts of education and exposure individuals receive on plant-based and vegan diets will help people become more familiar with these diets.