The background is a dark green color. In the top left corner, there is a branch with green leaves. In the top right corner, a hand holds a knife over a small white bowl containing green soup with two leaves. In the bottom left corner, a hand holds a fork over a plate of food consisting of sliced cucumbers, tomatoes, and hard-boiled eggs. In the bottom right corner, a hand holds a fork over a plate of food consisting of broccoli, sliced carrots, and a piece of bread. In the center, the title 'Fruit & Veggies' is written in a large, white, sans-serif font. Above the title is a white wavy line, and below it is a white horizontal line.

Fruit & Veggies

Melissa Milliron, Margaret Mueller,
Emma Nodine, Adam Rose, &
Yessica Negron

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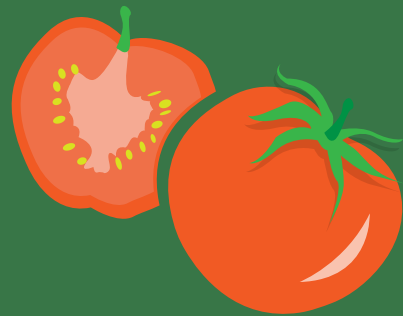
Problems & Improvements



Analysis



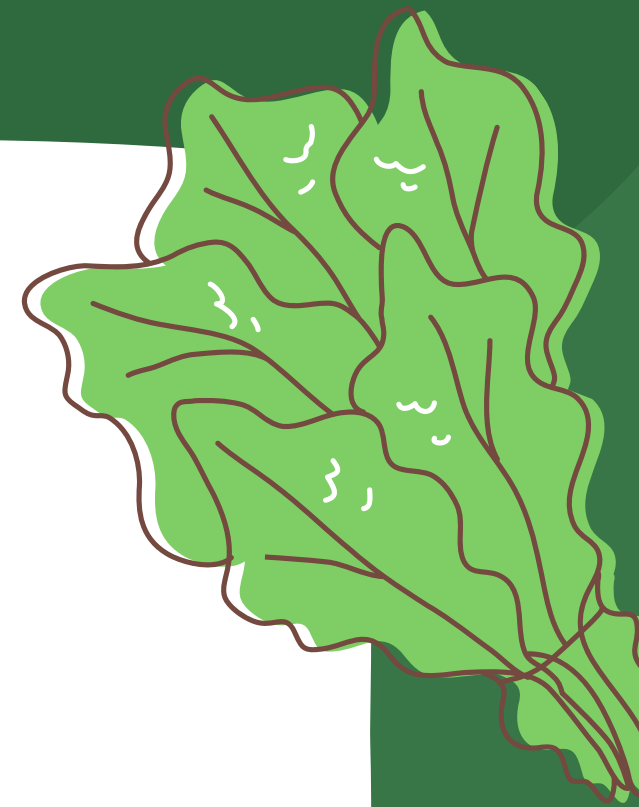
Future Research



Background



- **Provide key nutrients:**
 - **Vitamins:** A, C, and K
 - **Minerals:** Potassium and Magnesium
 - **Antioxidants:** beta-carotene and flavonoids
- **Regular consumption:**
 - **Supports brain functioning**
 - **Regulating mood, stress, energy levels**
 - **Enhances immune health**
 - **Lowers the risk of chronic diseases**



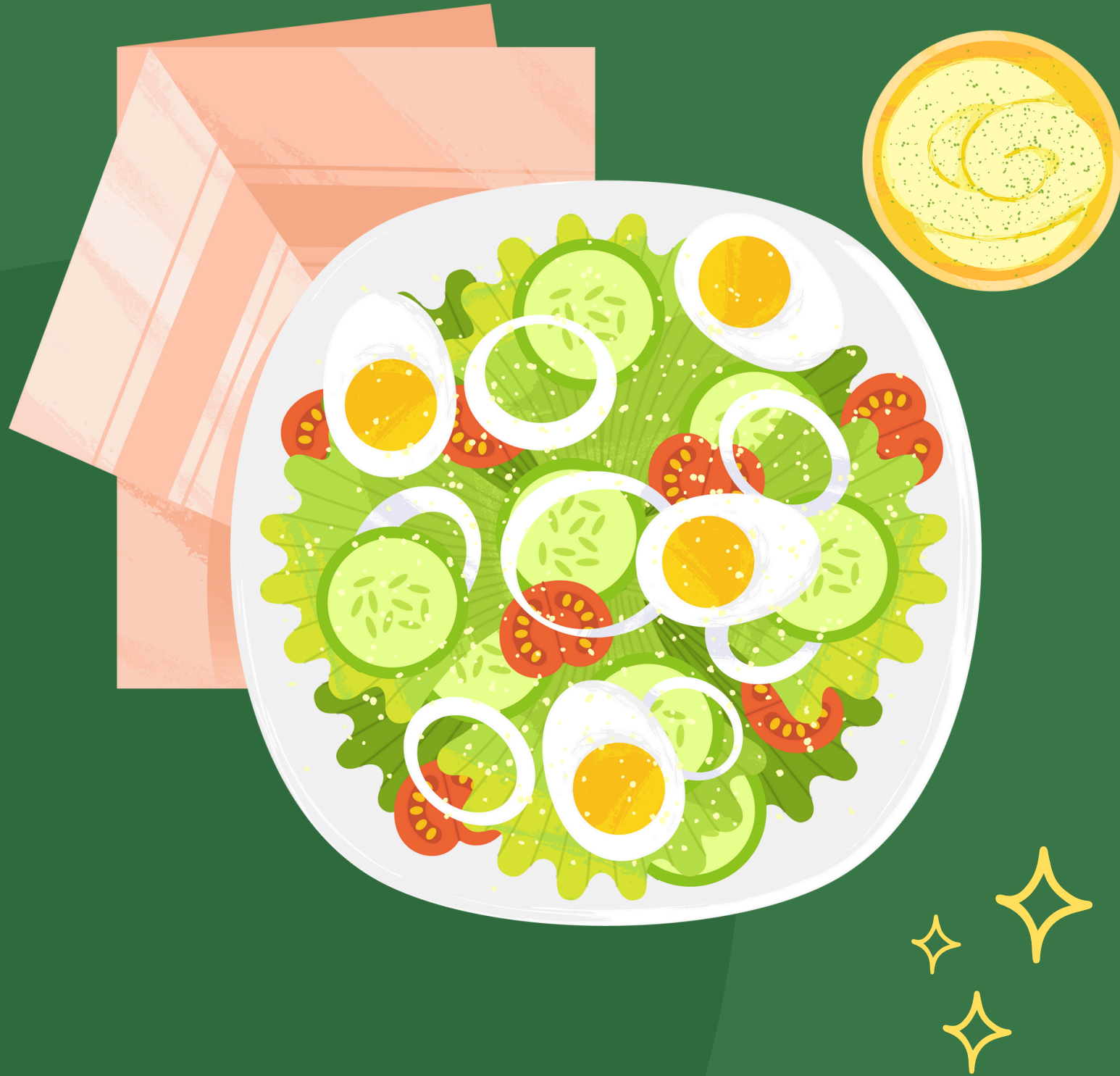
Purpose

Nutritional challenges include:

- Busy schedules
- Irregular meal patterns
- Reliance on fast foods

Research objectives:

- Understand nutritional benefits of fruits and vegetables for college students.
- Identify barriers to fruit and vegetable consumption.
- Explore strategies to promote healthy eating on campus.
- Encourage long-term health improvements, energy levels, and well-being



Survey Instrument

- Google Forms survey consisting of 15 questions
- Distribution method
 - Friends/roommates
 - Classmates
 - Clubs/organizations
 - Social media
- Types of questions
 - Mostly closed-ended
 - Multiple choice and multi-select
 - Open-ended



How many servings of vegetables do you consume in a day? *

WHAT'S **A SERVING?**

FRUITS 2 cups per day

ONE MEDIUM FRUIT



= ABOUT THE SIZE
OF YOUR FIST

FRESH, FROZEN OR CANNED



= 1 CUP

DRIED



= 1/2 CUP

100% FRUIT JUICE



= 1/2 CUP

VEGETABLES 2½ cups per day

RAW LEAFY VEGETABLE



= 2 CUPS

FRESH, FROZEN OR CANNED



= 1 CUP

100% VEGETABLE JUICE



= 1 CUP

These recommendations are daily goals
based on a 2,000-calorie/day eating pattern.

Multiple Choice

☐ 0

☐ 1-2

☐ 3-4

☐ 5+

Multi-Select

How do you prefer to buy your fruits? Select all that apply. *

- ☐ Fresh
- ☐ Frozen
- ☐ Canned
- ☐ Dried
- ☐ 100% Juice
- ☐ I do not buy fruits

Open-Ended



Do you have any dietary restrictions? *

☐ Yes

☐ No

If you do have dietary restrictions, please describe them below.

Long answer text

Other Examples of Questions

How much money do you spend on fruits weekly? *

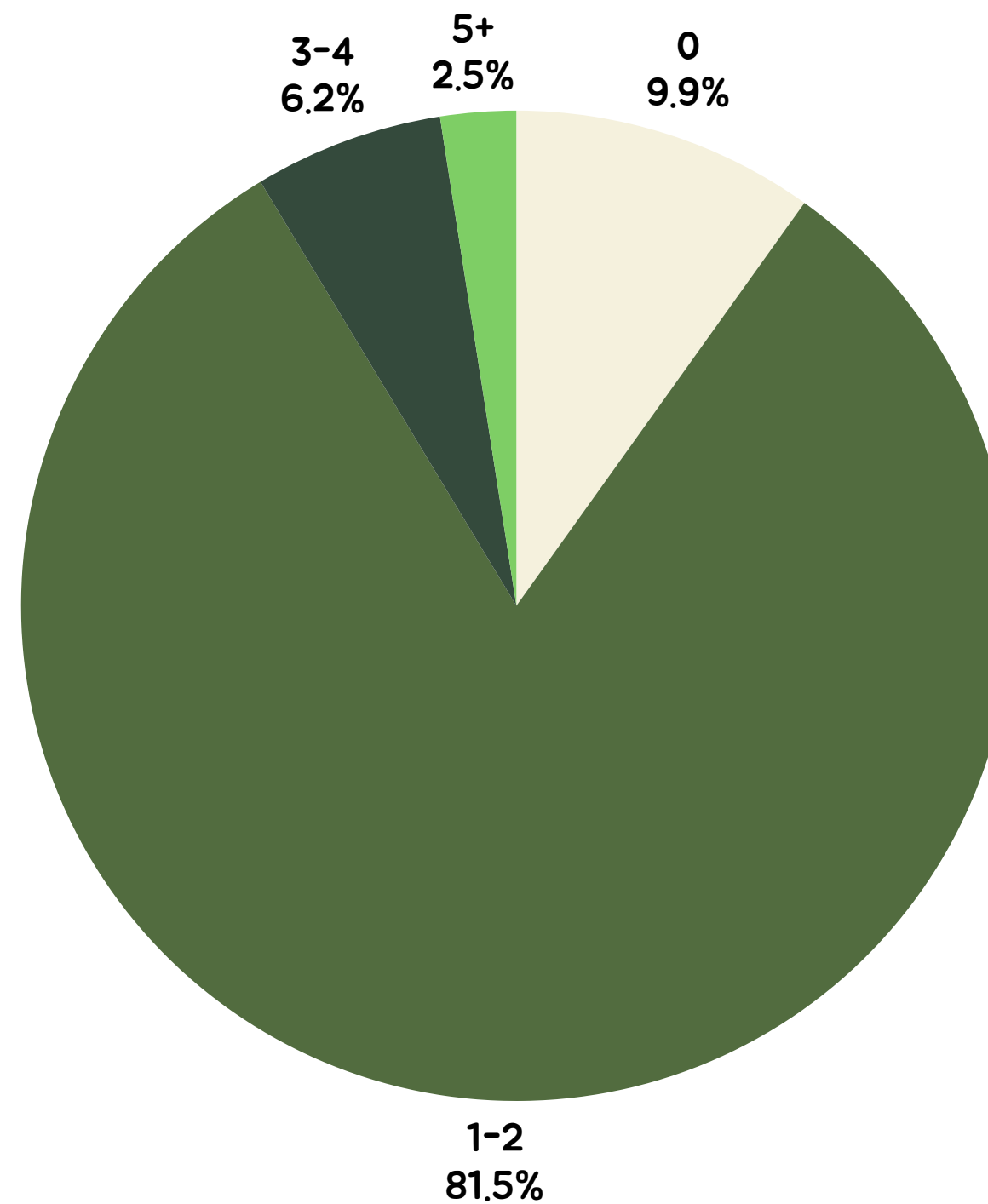
- ☐ I do not buy fruits during the week
- ☐ \$1-5
- ☐ \$6-10
- ☐ \$10-15
- ☐ \$15-20
- ☐ \$20-25
- ☐ \$25+

Does the price of fruit influence your decision to purchase or consume fruit weekly? *

- ☐ Yes
- ☐ No

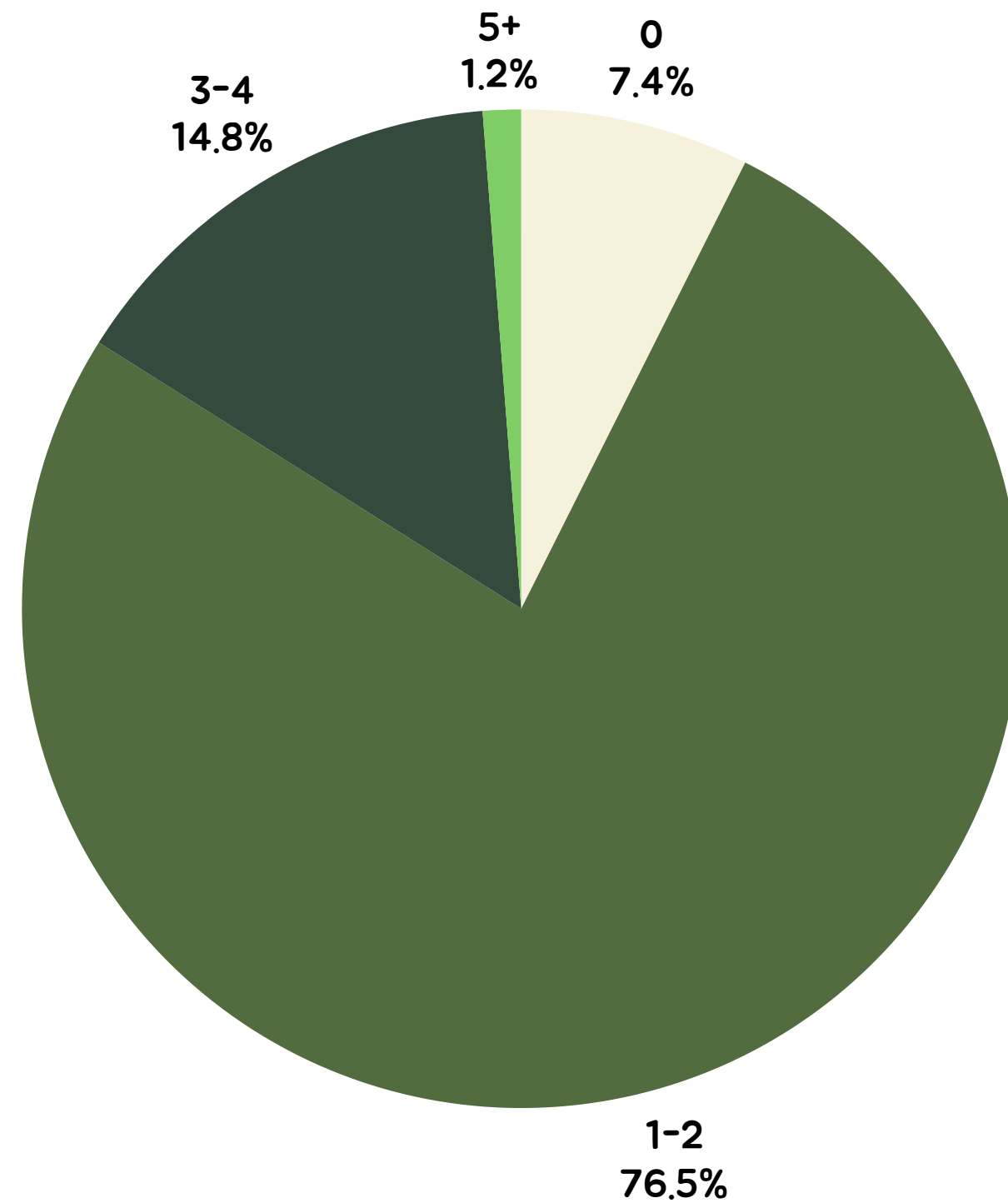
Results

How many servings of
fruit do you consume
in a day?



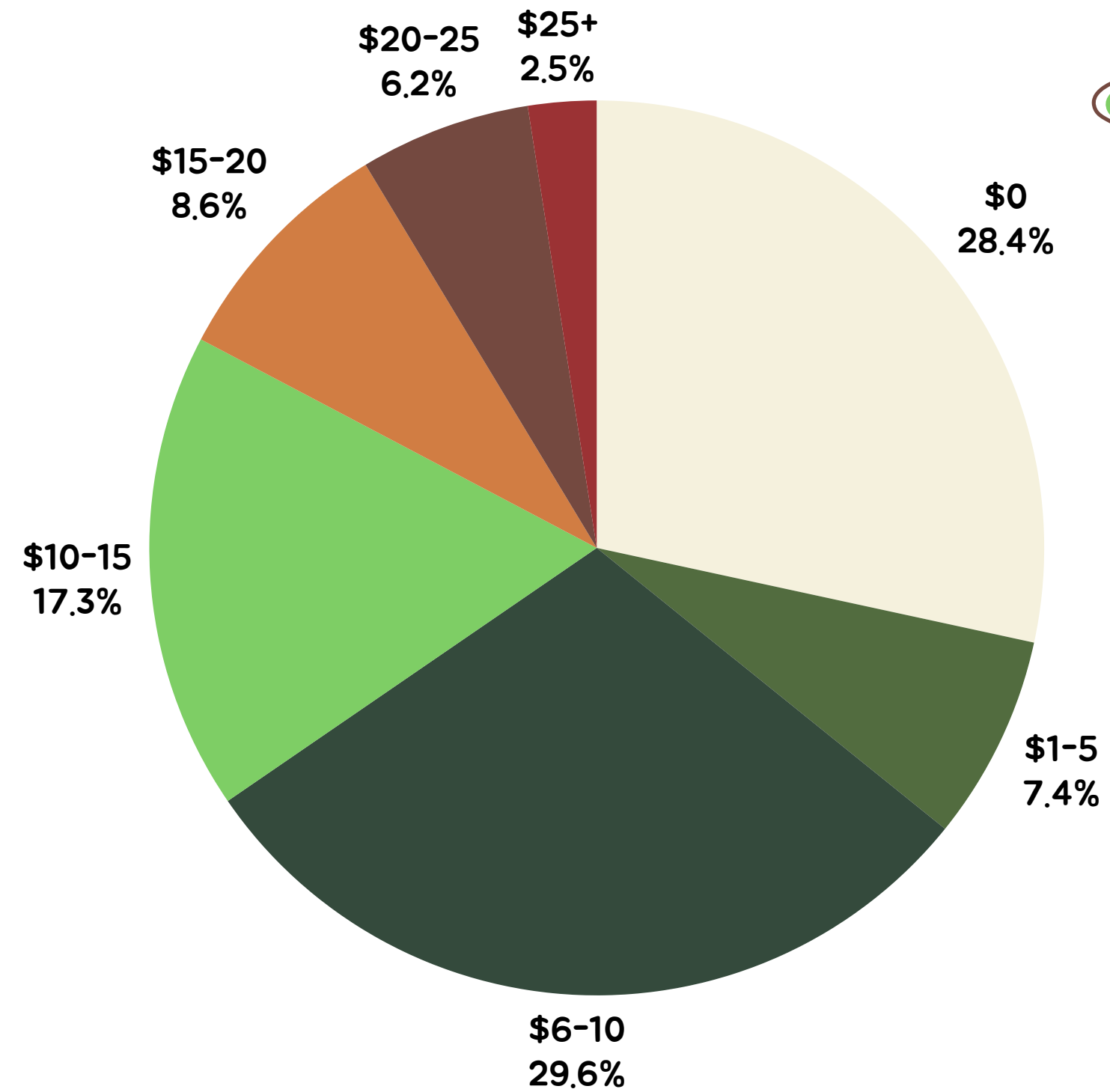
Results

How many
servings of
vegetables do you
consume in a day?



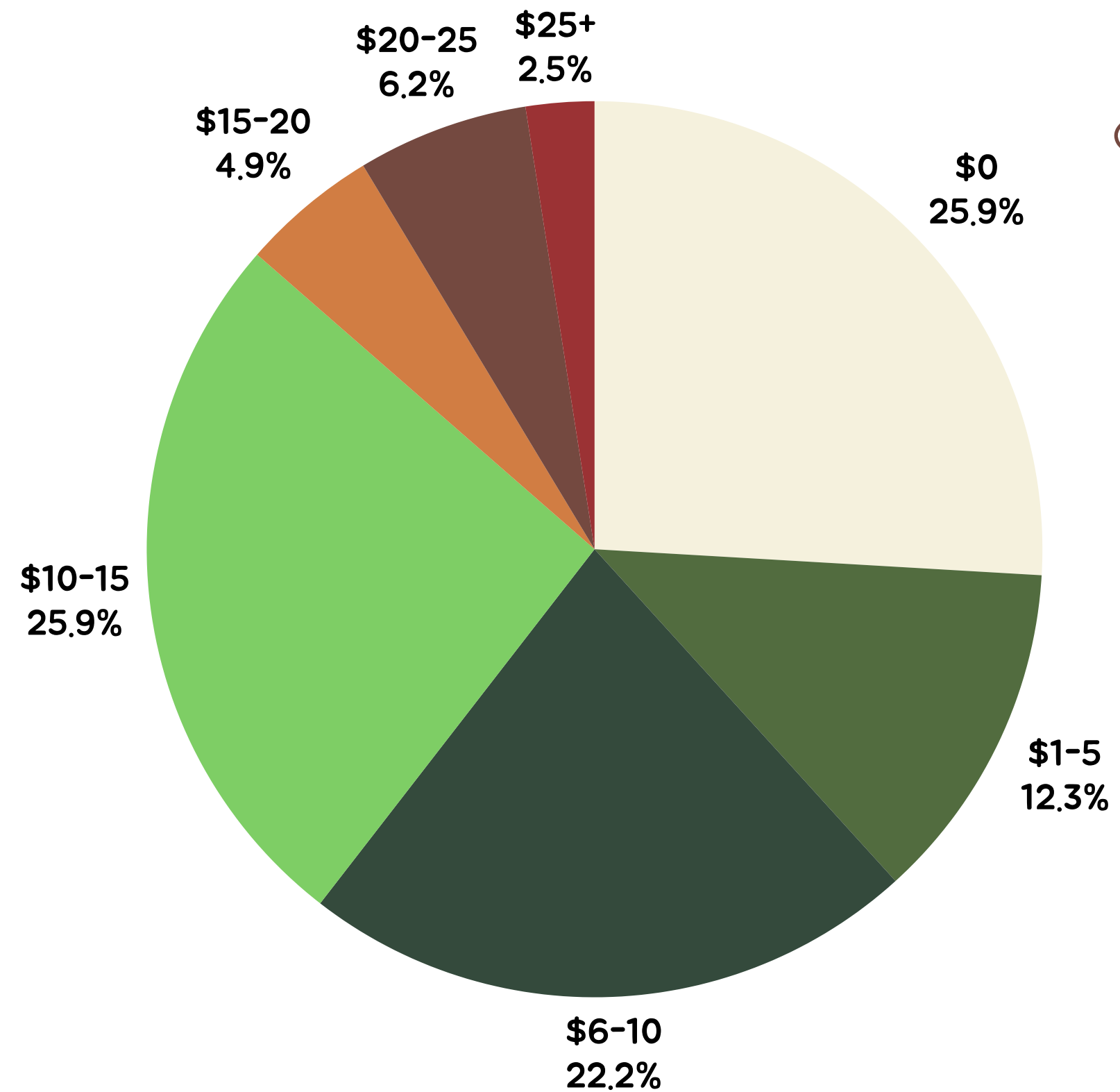
Results

How much money
do you spend on
fruits weekly?



Results

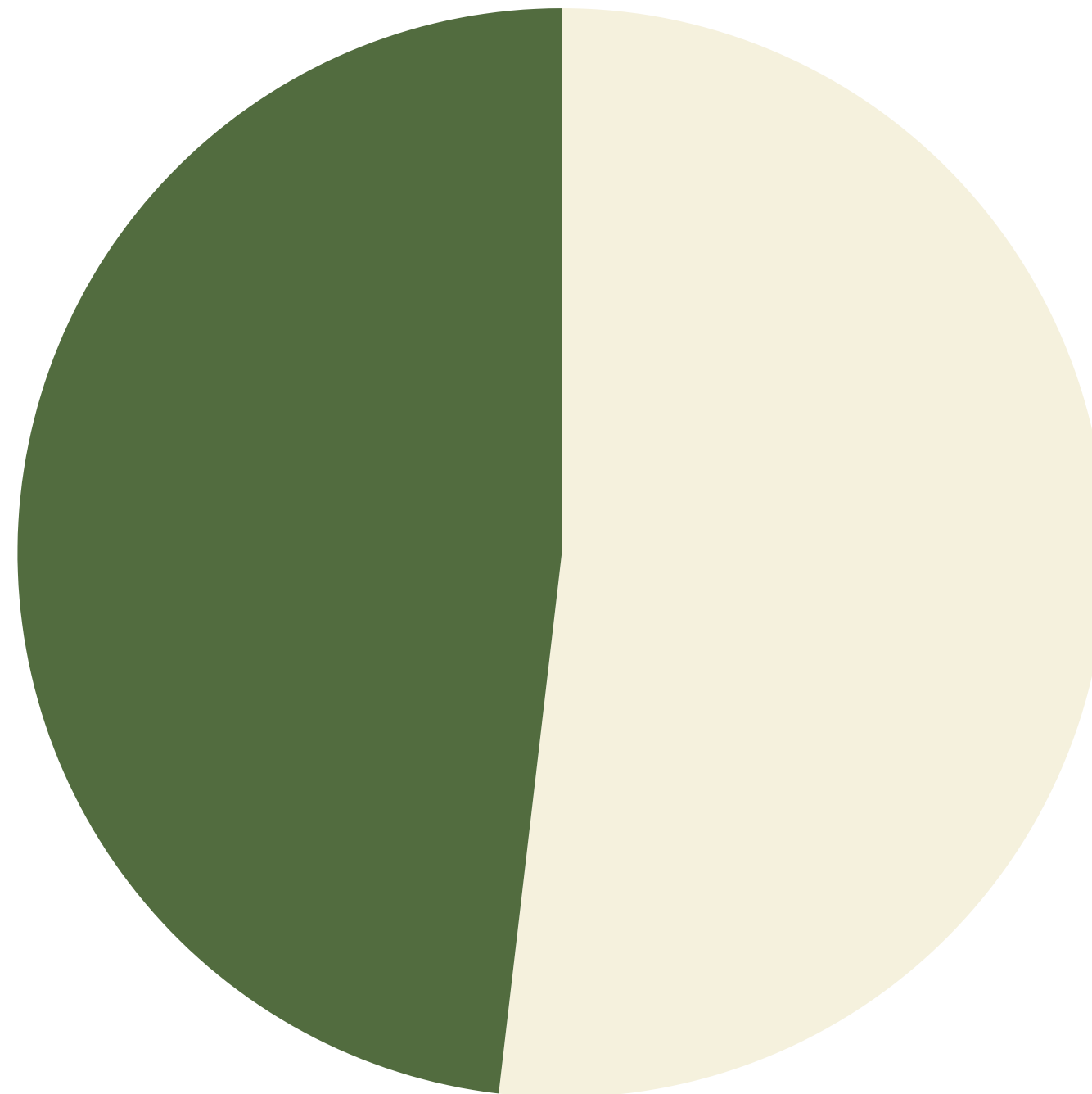
How much money
do you spend on
vegetables
weekly?



Results

Does the price
of fruit
influence your
decision to
purchase or
consume fruit
weekly?

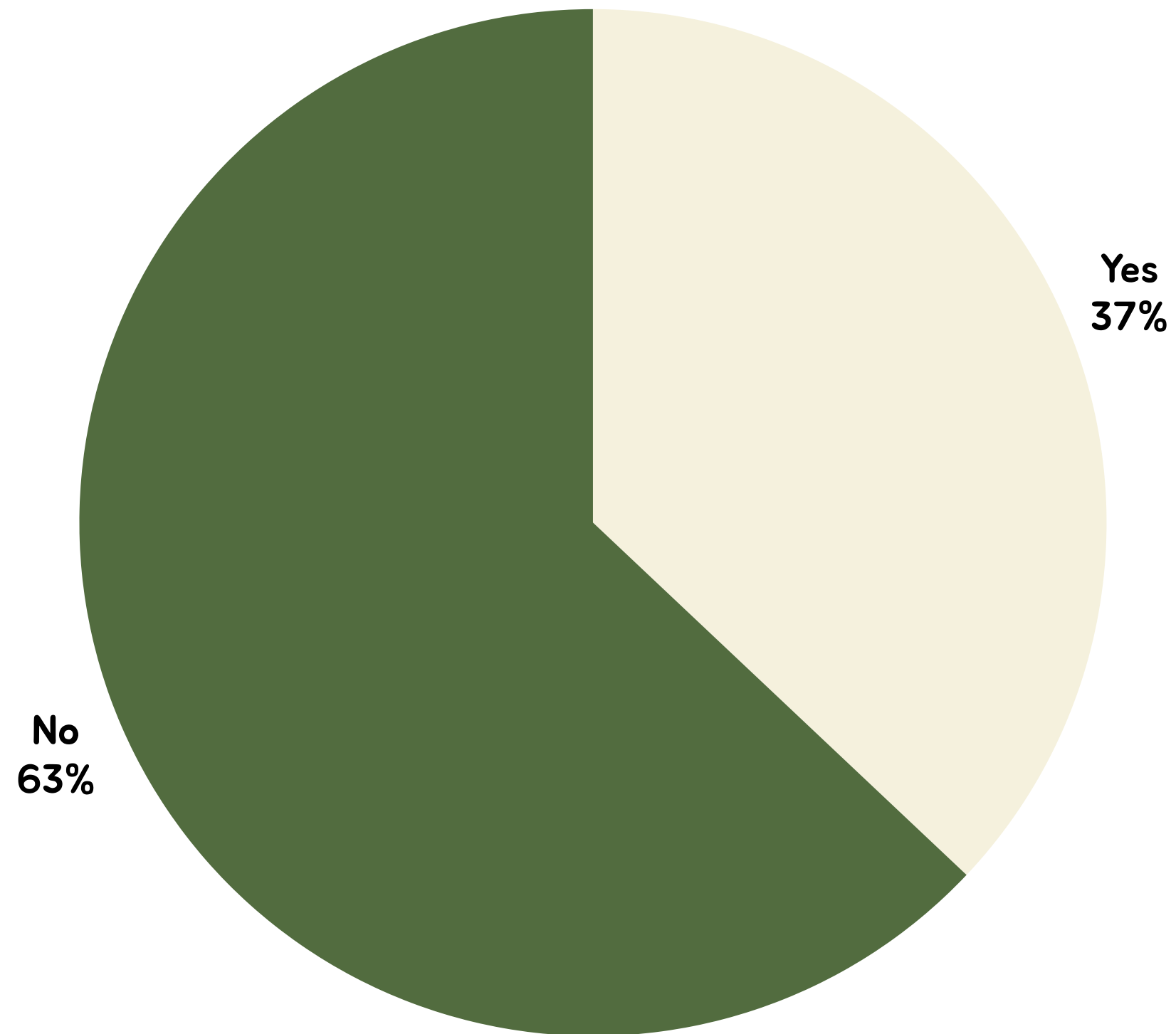
No
48.1%



Yes
51.9%

Results

Does the price of
vegetables
influence your
decision to
purchase or
consume
vegetables
weekly?



Results

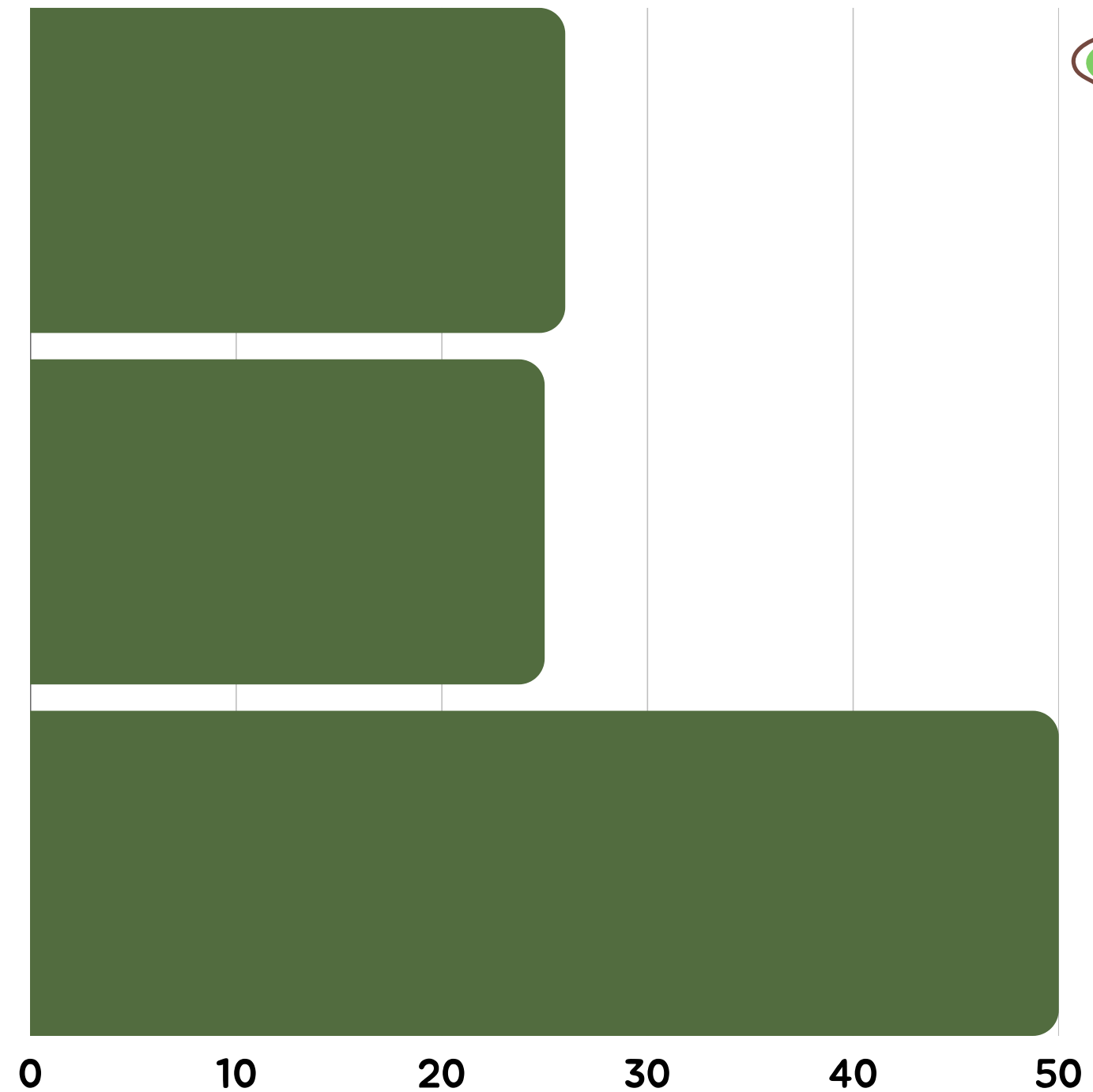
Do you have a meal
plan/use paw points
on campus?

Select all that apply

Dining hall meal plan

Paw points

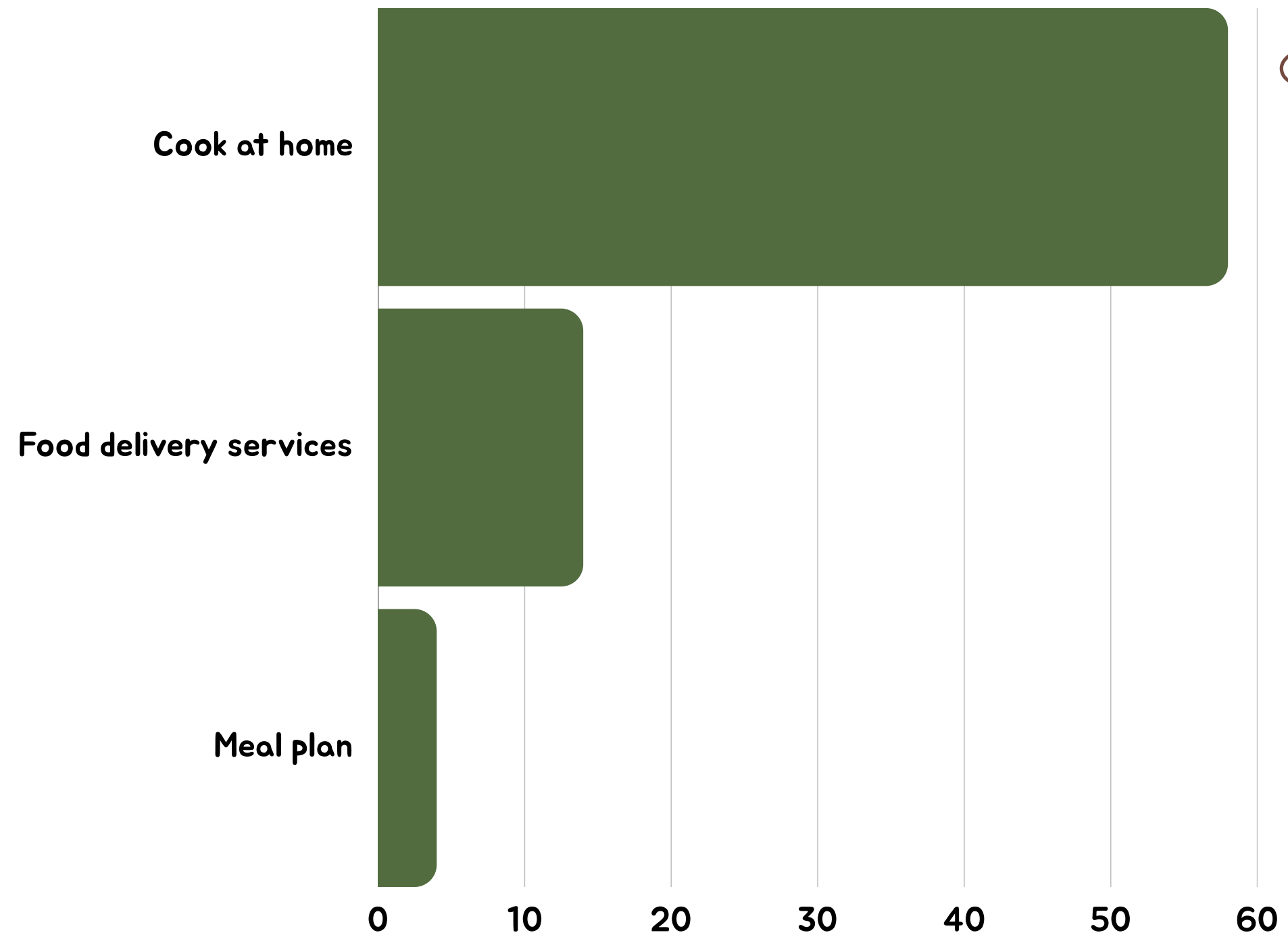
Neither



Results

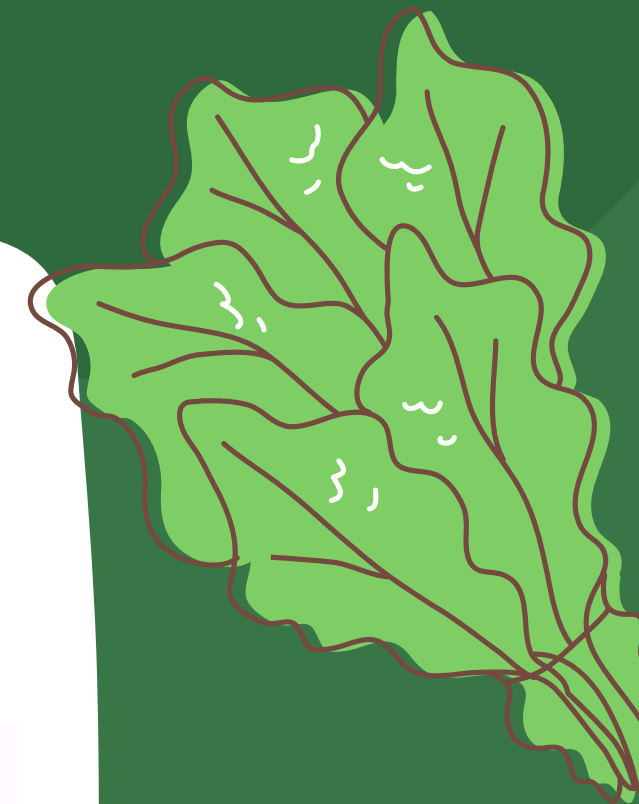
If you do not utilize
campus meal
plan/dining services
can you describe your
meal intake situation?

Select all that apply,
self reported "other"
responses were not
included



Stat Analysis

Gender does not have an impact on consumption of vegetables or fruits ($p=0.334$, $p=0.859$ respectively)



gender * servingsofveggies Crosstabulation

Count		servingsofveggies				Total
		0	1-2	3-4	5+	
gender	Female	3 _a	47 _a	10 _a	1 _a	61
	Male	2 _a	14 _a	2 _a	0 _a	18
	Nonbinary	1 _a	1 _b	0 _{a, b}	0 _{a, b}	2
Total		6	62	12	1	81

Each subscript letter denotes a subset of servingsofveggies categories whose column proportions do not differ significantly from each other at the .05 level.

gender * servingsoffruit Crosstabulation

Count		servingsoffruit				Total
		0	1-2	3-4	5+	
gender	Female	5 _a	51 _a	4 _a	1 _a	61
	Male	3 _a	13 _a	1 _a	1 _a	18
	Nonbinary	0 _a	2 _a	0 _a	0 _a	2
Total		8	66	5	2	81

Each subscript letter denotes a subset of servingsoffruit categories whose column proportions do not differ significantly from each other at the .05 level.



Stat Analysis cont.

Although not statistically significant at the 0.05 level ($p=0.153$), those who did not have a meal plan were more likely to consume vegetables.

		servingsofveggies				Total
		0	1-2	3-4	5+	
mealplan	Dining Hall meal plan	0a	6a	1a	0a	7
	Dining Hall meal plan, Paw Points	3a	16a	0b	0a, b	19
	Neither	1a	0b	1a	0a, b	2
	Niether	1a	37b	8b	1a, b	47
	Paw Points	1a	2a	2a	0a	5
	Paw Points, Niether	0a	1a	0a	0a	1
Total		6	62	12	1	81

Each subscript letter denotes a subset of servingsofveggies categories whose column proportions do not differ significantly from each other at the .05 level.



Stat Analysis cont.

- Although not statistically significant, as the year of school increased, the influence of fruit and vegetable pricing has greater effect.
- Year in school had no significant difference on fruit and vegetable consumption habits.
- No stat. significant differences among colleges.
- Influence of the price of vegetables and fruits had no effect on consumption of vegetables and fruits ($p=0.334$ and $p=0.985$, respectively)





Problems & Improvement

- **Problems**
 - Unbalanced demographics
 - 75% female
 - Majority upperclassmen
 - Unaware of financial status and how it impacts habits
 - Dietary restrictions
- **Improvements**
 - More questions for more data
 - Target males and underclassman
 - Sliding scale to select how much money you spend on food rather than providing a range
 - Ask about variety
- **Generalizability**
 - Would be improved by increasing male responses
 - UGA 42.2% male 57.8% female
 - Survey 22.2% male 75.3% female
 - Small sample size
 - 81 respondents vs. 41,615 UGA students



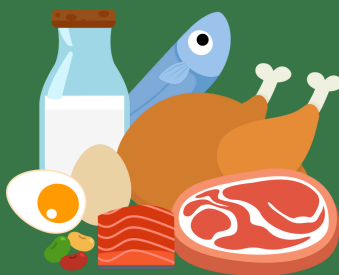


Future Research

- 
- Construct a survey that implements the Health Belief Model (HBM) to better understand individuals' perceptions of fruit and vegetable intake on their health
 - Implement a Likert scale question asking opinions on the impact of fruit and vegetable on their overall health
- 

Which factor do you percieve to have a greater impact on overall health?

Fruits and
Vegetables



Proteins

Fruits and
Vegetables



Exercise

Fruits and
Vegetables



Sleep

Fruits and
Vegetables



Mental Health

Which factor do you percieve to be the hardest to prioritize?

Fruits and
Vegetables



Proteins

Fruits and
Vegetables



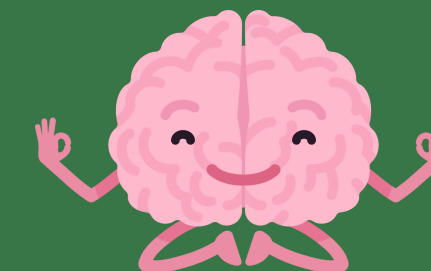
Exercise

Fruits and
Vegetables



Sleep

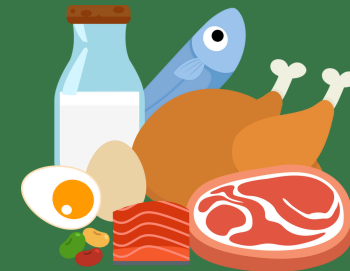
Fruits and
Vegetables



Mental Health

Which factor do you percieve to have the most resources accessible?

Fruits and
Vegetables



Proteins

Fruits and
Vegetables



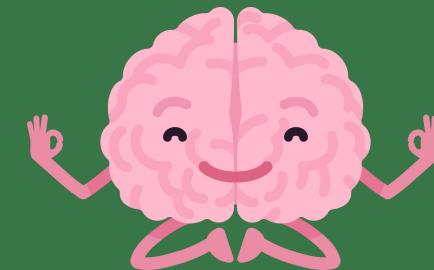
Exercise

Fruits and
Vegetables

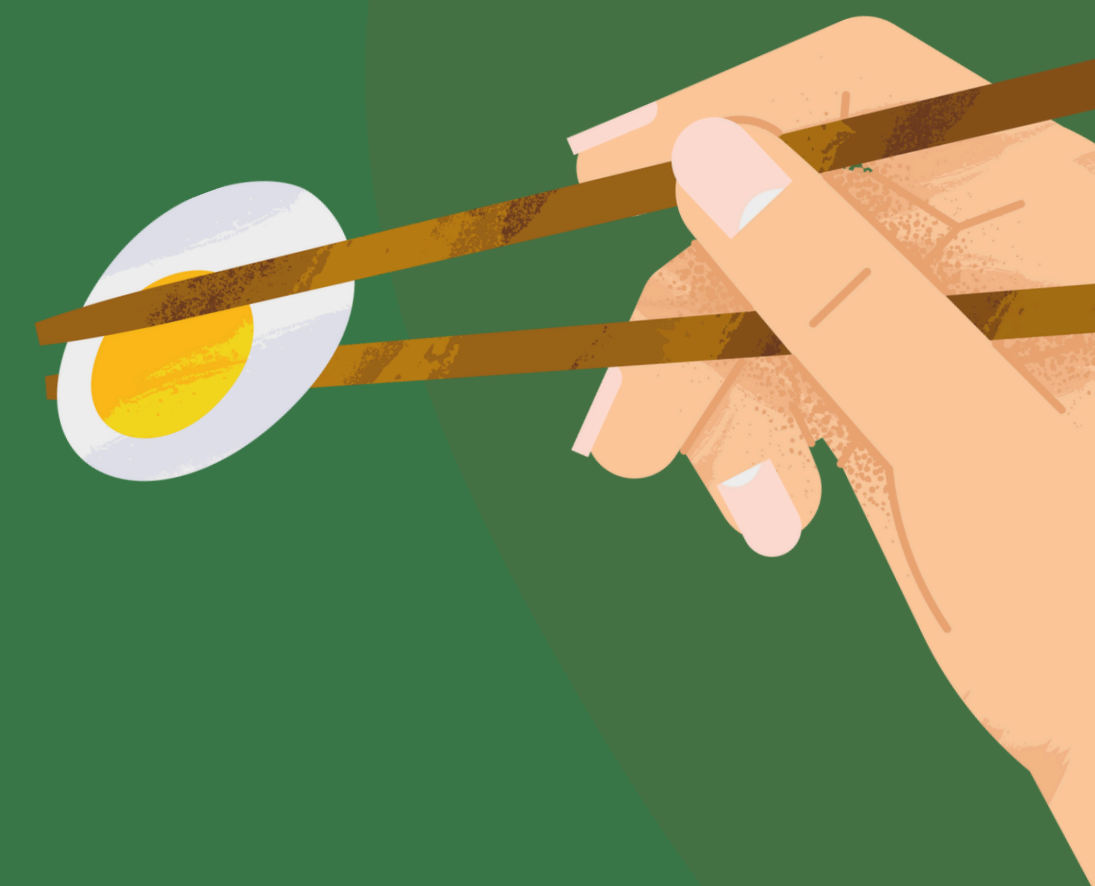
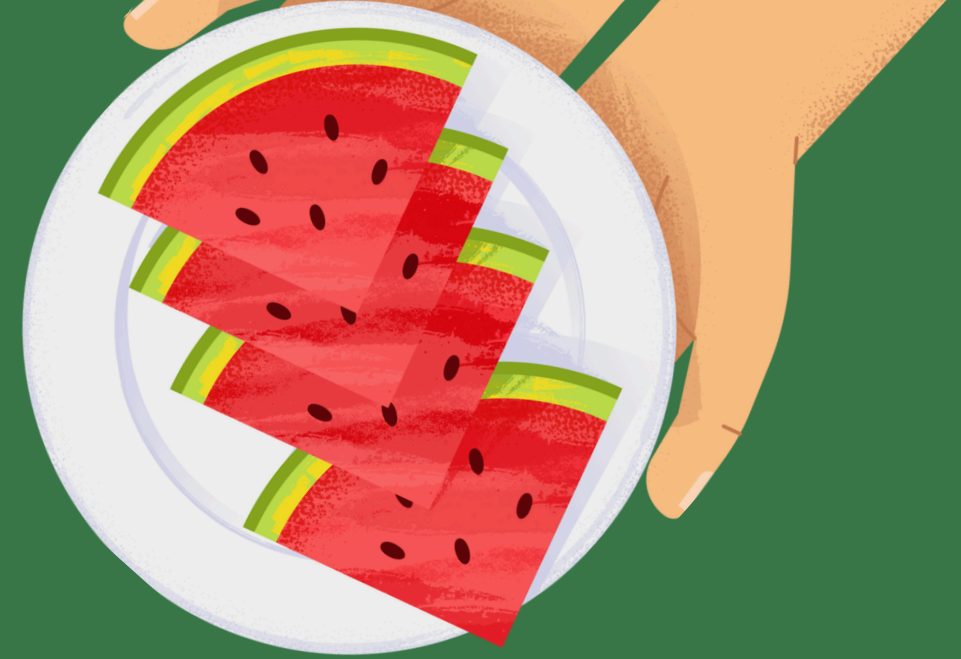


Sleep

Fruits and
Vegetables



Mental Health



Thank You



Questions?

