

# Subscribing to a Weekly Produce Program Improves Dietary Quality

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## Background

- Numerous studies have demonstrated the benefits of a diet rich in vegetables and fruits.<sup>1-2</sup>
- Field Goods™ is a weekly local produce subscription program in NY State.<sup>3</sup>
- Weekly delivery consists of 5 to 8 freshly-harvested vegetables and fruits.



## Objectives

- To assess the impact of Field Goods™ subscription on:
  - ✓vegetable intake,
  - ✓fruit intake,
  - ✓frequency of shopping at a grocery store, and
  - ✓money spent at the grocery store.

## Methods

### Data Collection

- Convenience sample of new program subscribers.
- Participants completed an online survey:
  - ✓Before receiving their first Field Goods bag
  - ✓At ~3 months after receiving their first bag
  - ✓At ~1 year follow-up

## Methods

- Survey collected information:
  - ✓Fruit & vegetable FFQ
  - ✓Frequency of shopping at the grocery store
  - ✓Money spent at the grocery store
  - ✓Satisfaction with health and diet

## Results

### Participants

- Baseline: 367 respondents
- 3 months: 181 respondents
- 90% White, highly educated

Table 1. Average age, weight, and body mass index of respondents (n=367)

Characteristic	Mean	SD	Range
Age (yrs)	42	12	23-74
Weight (lb)	165	45	104-314
BMI (Kg/m <sup>2</sup> )	26.9	6.7	18.4-50.3

- At 3 months, 49.7% (n=90) of participants purchased bags on a weekly basis.

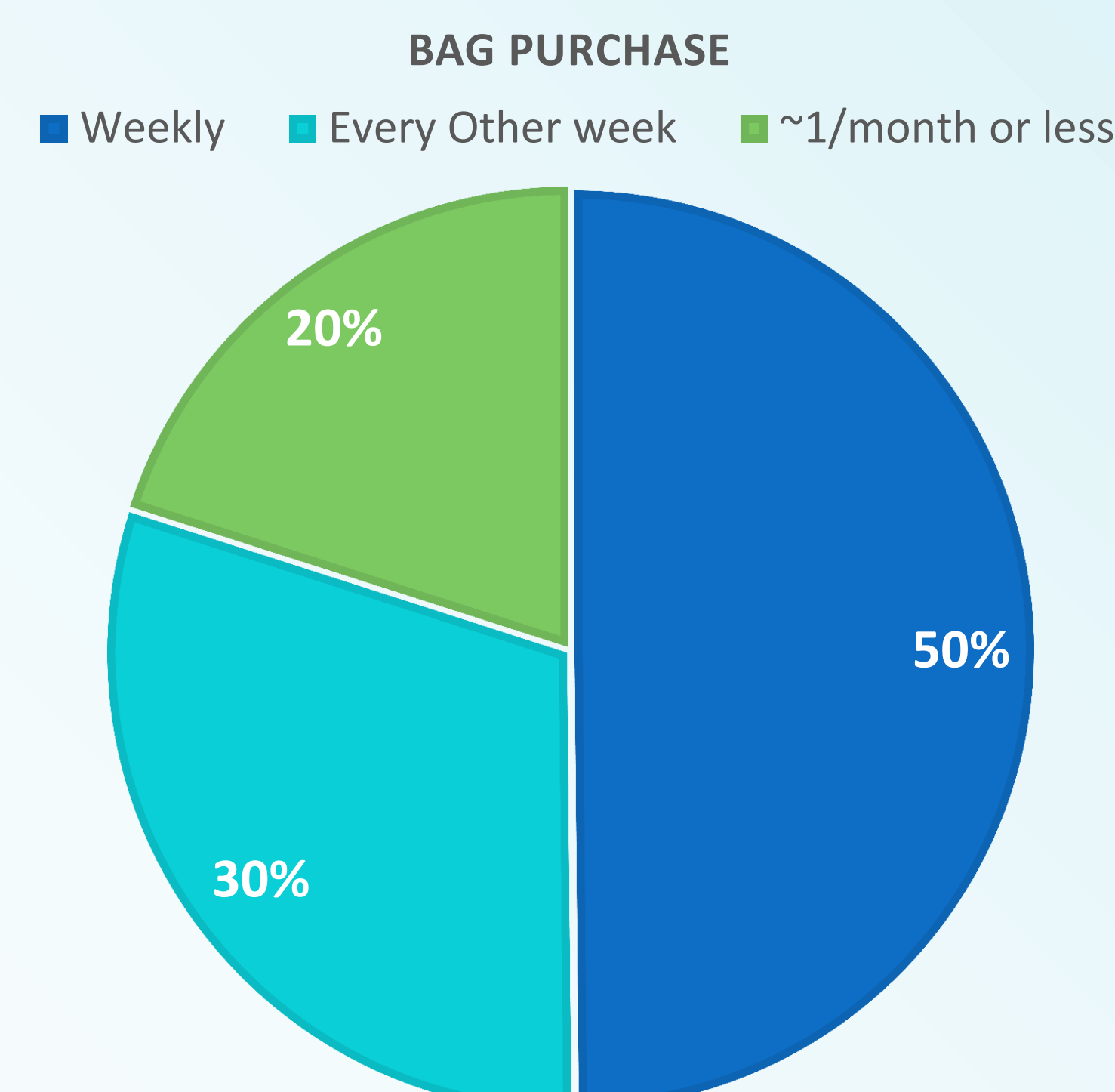


Figure 1. Frequency of purchasing produce bags at 3 months (n=181)

## Results

### At 3 months:

- On average, participants spent \$113 less at the grocery store per month ( $P<.001$ ).

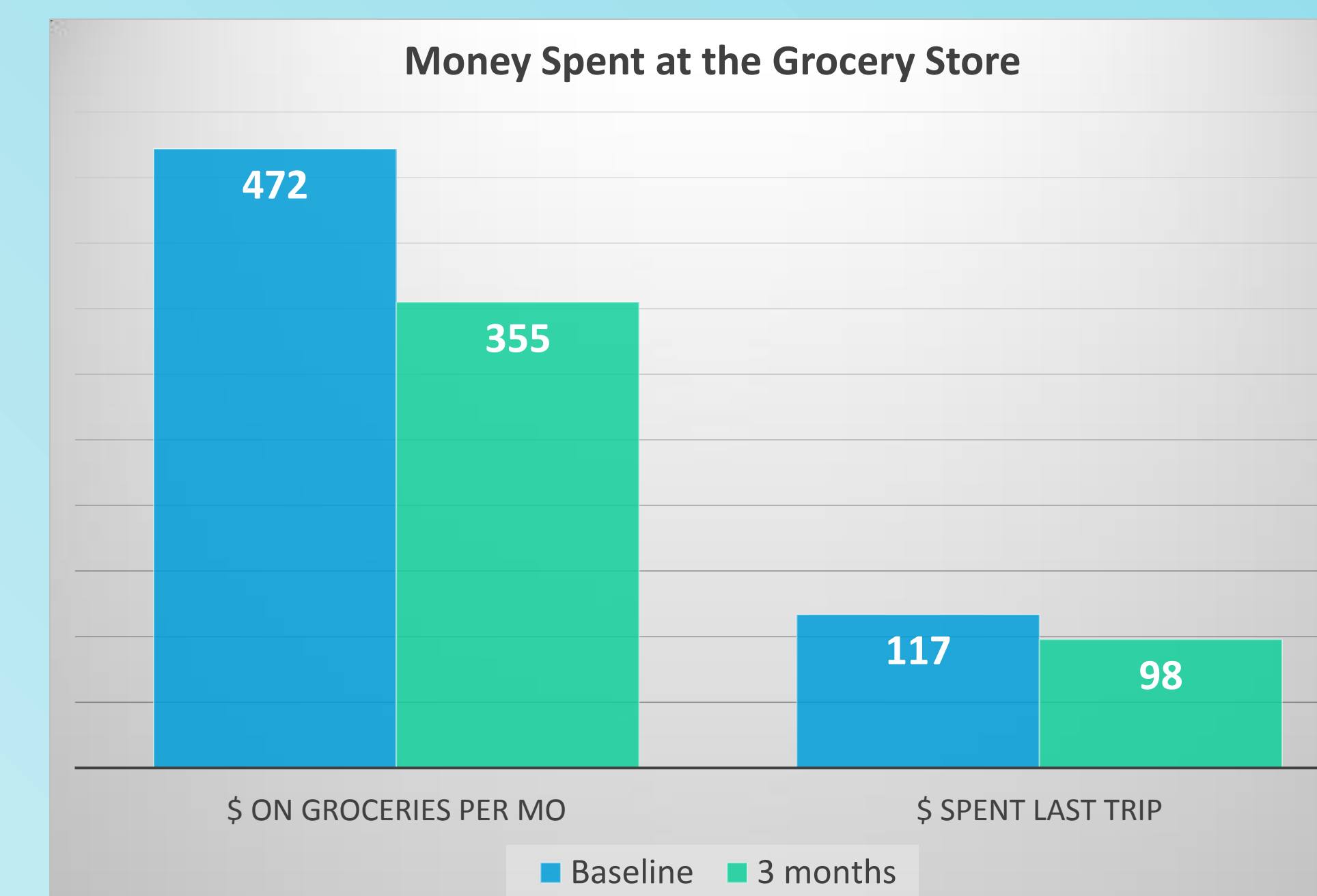


Figure 2. Frequency of purchasing produce bags at 3 months (n=181)

### Diet Quality

#### At 3 months more subscribers :

- Described the quality of their diet as “excellent/very good” (58%) compared to baseline (51%) ( $P<.001$ ).
- Indicated being “extremely satisfied/very satisfied” with the quality of their diet (40%) compared to baseline (29%) ( $P<.001$ ).

### Fruit and Vegetable Intake

#### Satisfaction with intake at 3 months:

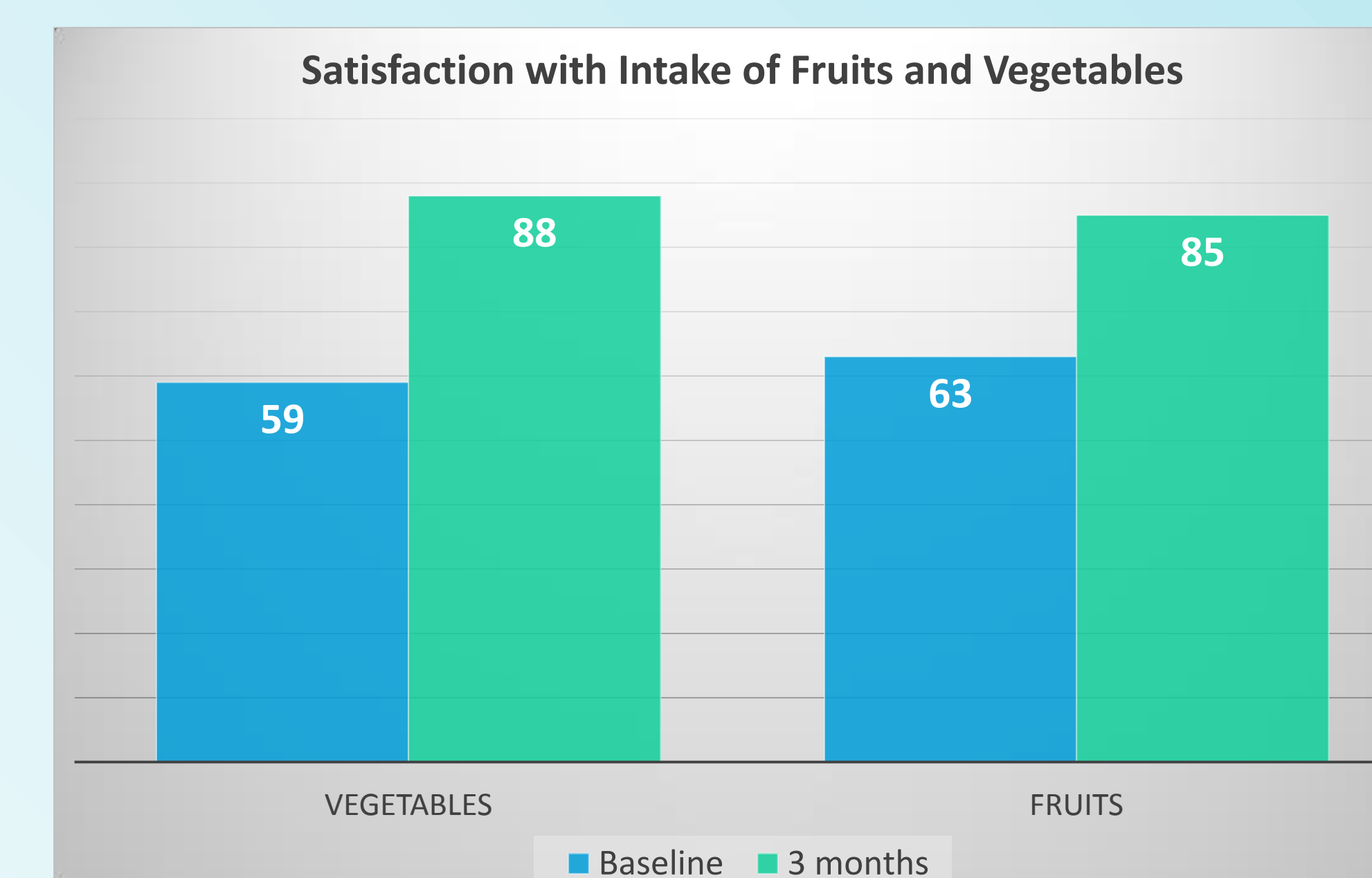


Figure 3. Number of respondents who indicated being extremely satisfied/very satisfied with the amount of fruits and vegetables they were eating at baseline and 3 months.

## Results

### Fruit and Vegetable Intake

- Subscribers increased weekly vegetable intake by up to 5 svgs/day.
- Frequent subscribers increased their fruit intake by .3 svgs/week ( $P<.001$ )

Table 2. Change in vegetable intake and variety after a 3 months subscription to Field Goods™

Group	Baseline	3 Months	P-Value
<b>Total Sample</b>			
Vegetable (Svgs/wk)	48.1	51.6	0.073
<b>Weekly Subscribers</b>			
Vegetable (Svgs/wk)	50.0	55.0	0.05
<b>Vegetable Variety</b>			
Types of Vegetable	25	27	<.001

## Conclusions

- Subscribing to a weekly delivery of local produce can have a positive impact on fruit and vegetable intake while possibly decreasing total monthly grocery bill.



## References

- Appleton et. al, Increasing vegetable intakes: rationale and systematic review of published interventions. *Eur J Nutr.* 2016;55(3):869-896.
- Sikand G, Kris-Etherton P, Boulos NM. Impact of functional foods on prevention of cardiovascular disease and diabetes. *Curr Cardiol Rep.* 2015;17(6):39.
- Field Goods™, LLC. Fresh Foods from Small Farms. <http://www.field-goods.com/> Accessed May 4, 2016.