

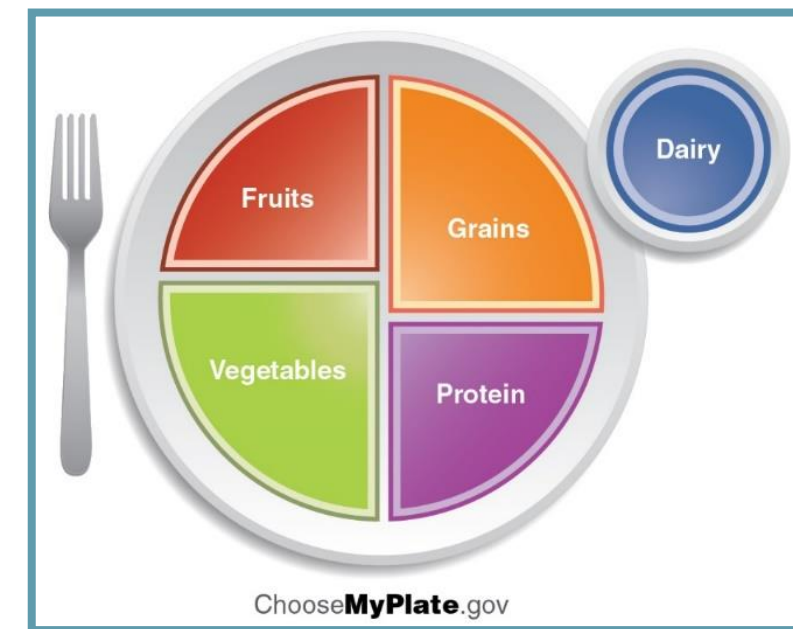
Dietary Behaviors and Cognitions of Participants 2-years Following an Education-Based Dietary Intervention



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BACKGROUND

- Increasing fruits and vegetables and weight maintenance is recommended for optimal health and chronic disease prevention¹



- 4.2% of young adults eat the recommended 5 servings of fruits and vegetables²
- On average, young adults gain 15kg during this time period and only 10% return to a healthy weight³
- Dietary and behavior interventions during this time period can help to improve health outcomes⁴

OBJECTIVES

To determine cognitions of an 8-week education-based dietary intervention, and if dietary behaviors are retained after 2 years

STUDY DESIGN

Recruitment



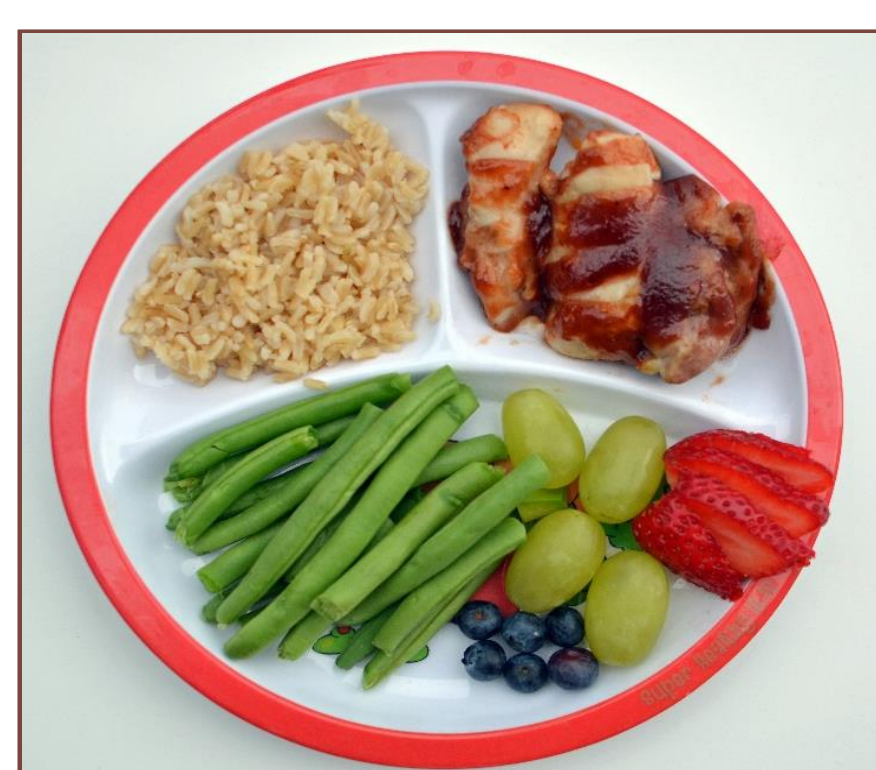
- 36 previously enrolled in the study
- 76% response rate (n = 25)

Survey



- 260-item online questionnaire
- Determine current health behaviors
- Intervention feedback

Dietary Recall



- 24-hour dietary recall via phone
- Analyzed with Nutritionist Pro software

FUNDING

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RESULTS

Table 1: Demographic characteristics of participants.

	Total (n=25)
Age (x ± SD)	24.5 ± 2.3
Sex (% male)	8 (32)
Race/ethnicity (%)	
White	14 (56)
African-American	2 (8)
Asian	2 (8)
Hispanic	1 (4)
Other	6 (24)
Body Mass Index (x ± SD)	26.6 ± 4.6

"The study really forced me to be mindful about what I was eating. I also learned things that I didn't know I needed to know."

"I still try to mentally ascribe to making half of my meals fruits and/or vegetables."

"I lost some weight and am able to make more healthy choices now regarding my diet."

"It has impacted me no differently. I still eat in somewhat the same ways as I did in the past with some minor changes."

"It was really hard, but it was helpful to have the weekly sessions. I wouldn't like to have such a challenging diet, though."

CONCLUSIONS

Dietary quality did decrease at follow-up; however, participants were able to retain some nutrient improvement and had a positive outlook on the intervention and education received.



1. Chen J et al. *Journal of Food Science*. 2014
 2. American College Health Association. 2017
 3. Allman-Farinelli. *Healthcare*. 2015
 4. Bondia-Pons et al. *Molecular Nutrition and Food Research*. 2015

60% reported 8-weeks as sufficient time

To improve the intervention:
 • Cooking lessons
 • Recipes with nutrient content
 • Recommendations for food and physical activity

Weekly counseling sessions helped participants:
 • Be accountable
 • Motivate
 • Educate

96% would complete the intervention again

Participant Feedback of the Intervention

Table 2: Dietary intake of participants pre and post intervention and at 2-year follow up according to dietary recall.

Dietary Factor	Pre Intervention (Mean ± SD)	Post Intervention (Mean ± SD)	2-Year Follow-up (Mean ± SD)	P-value
Kilocalories	2263.3 ± 1375.1	1935.7 ± 622.6	1757.3 ± 637.4	0.31
Carbohydrate (%)	42.6 ± 13.4	53.8 ± 9.6	42.8 ± 8.4	0.11
Fat (%)	36.1 ± 10.0	29.4 ± 9.2	34.2 ± 11.1	0.87
Protein (%)	16.4 ± 6.3	19.3 ± 4.5	20.8 ± 7.9	0.02
Fiber (grams)	19.2 ± 12.6	34.0 ± 15.2	18.7 ± 8.4	<.0001
Insoluble fiber (grams)	1.4 ± 2.1	3.3 ± 2.5	1.0 ± 1.1	<.0001
Soluble fiber (grams)	0.3 ± 0.4	0.8 ± 0.6	0.3 ± 0.4	0.92
Total Sugar (grams)	78.7 ± 34.0	105.4 ± 43.5	78.1 ± 31.0	0.15
Empty Calories	997.6 ± 948.1	441.6 ± 240.1	631.3 ± 416.1	0.005
Monounsaturated Fat (grams)	21.0 ± 23.0	16.8 ± 12.0	19.4 ± 13.2	0.79
Polyunsaturated Fat (grams)	13.9 ± 15.0	10.1 ± 6.7	12.8 ± 10.3	0.83
Saturated Fat (grams)	28.8 ± 21.6	20.5 ± 13.1	23.9 ± 15.9	0.62
Cholesterol (grams)	227.3 ± 215.6	247.4 ± 247.5	284.4 ± 271.0	0.17
Fruit & Vegetables (cups)	2.5 ± 2.0	5.2 ± 2.4	2.8 ± 1.5	<.0001
Weight (kg)	77.0 ± 15.1	76.0 ± 14.5	76.3 ± 16.8	