

# Online Nutrition Curriculum Improves Middle School Students' Food, Nutrition, and Physical Activity Practices

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## Introduction

Previous evaluation studies<sup>1,2</sup> of the goal-oriented EatFit curriculum demonstrated positive eating and fitness behavior change outcomes when delivered in person. Pivoting to remote programming due to the COVID-19 pandemic presented an opportunity to evaluate the effectiveness of an online version of the curriculum.

During FFY21, a nutrition educator implemented an online version of the EatFit middle school curriculum. Six lessons were adapted for remote delivery and included activities focused on MyPlate, the nutrition facts label, hydration, fast food, physical activity, and goal setting. Students chose an eating and physical activity goal and tracked their progress in meeting those goals throughout the series.

The asynchronous video lessons were a combination of PowerPoint slideshows and engaging video clips of the nutrition educator introducing and ending each lesson. Each group was also provided with a synchronous introductory and review lesson which provided an opportunity to interact with the students and facilitate the collection of the online program surveys.



Eli Figueroa reviewing lesson objectives (above) and how to track fitness goals (below)

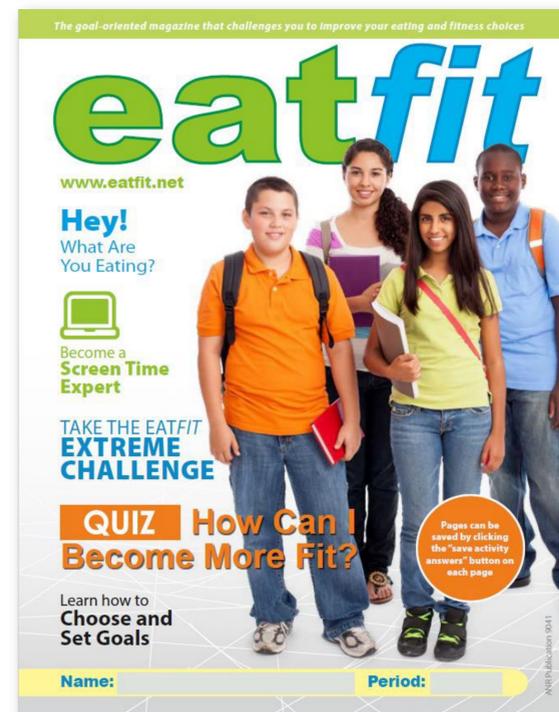


### Citations:

1. Horowitz M, Shilts MK, Townsend MS. EatFit: a goal-oriented intervention that challenges adolescents to improve their eating and fitness choices. *J Nutr Educ Behav.* 2004;36(1):43-44.
2. Shilts MK, Townsend MS. A goal setting intervention positively impacts adolescents' dietary behaviors and physical activity self-efficacy. *Journal of Youth Development.* 2012;7(4):92-108.

## Aim

To evaluate the improvement in nutrition, food safety, food resource management, and physical activity practices among youth participating in an online nutrition education series.



EatFit student workbook

## Method

- Students completed an online version of the EFNEP 6<sup>th</sup>-8<sup>th</sup> grade pre-post Nutrition Education Survey and answered two open-ended questions.
- Pre-post analyses were completed using the Web-Based Nutrition Education Evaluation and Reporting System (WebNEERS).

## Results

855 students from 3 middle schools received the online lessons and 284 students completed the pre-post surveys.

Differences in the pre-to-post scores indicated student improvement in desired behaviors:

- 88% improved their diet quality
- 51% improved food safety practices
- 49% improved food resource management practices
- 71% improved physical activity practices.

Examples of student responses to open-ended questions:

What did you enjoy the most about the online EatFit program?

*"What I really enjoyed was how they taught me all these health facts that I did not know before. Now I know what to eat and what not to eat to keep myself healthy."*

What is one positive change you made or plan to make to eat healthier and be more physically active?

*"EatFit encouraged me to consume less junk food and eat healthier foods, drink more water, and be more physically active. Before I drank lots of soda and ate chips and now I drink more water and more fruit. I also bike more often and go for runs."*

## Conclusions

- The online goal-oriented EatFit curriculum provided middle school students with the knowledge and skills to improve their nutrition, food safety, food resource management, and physical activity practices.
- An online version of EatFit is an alternative delivery method to consider in post-pandemic programming.