

EatFit: A Goal-Oriented Intervention that Challenges Adolescents to Improve Their Eating and Fitness Choices

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INTRODUCTION

Surveys show that many young people do not engage in the recommended levels of physical activity, nor do they have diets meeting the US Dietary Guidelines. These health behaviors contribute to obesity, now at an all-time high among adolescents.¹ With this in mind, we developed "EatFit" to improve the dietary and physical activity behaviors of middle school students.

OVERVIEW

Designed for 11- to 15-year-olds, the EatFit intervention has 3 components:

- **Workbook.** Each student receives his or her own copy of the full-color, 20-page, magazine-style EatFit workbook (Figure). It contains all worksheets, so no photocopying is necessary.
- **Web-based assessment** (www.eatfit.net). Computer technology is used to assist adolescents in diet assessment. The personalized assessment program is an interactive application that begins with adolescents entering a 24-hour diet record and concludes with personalized dietary feedback, goal setting, and a contract.

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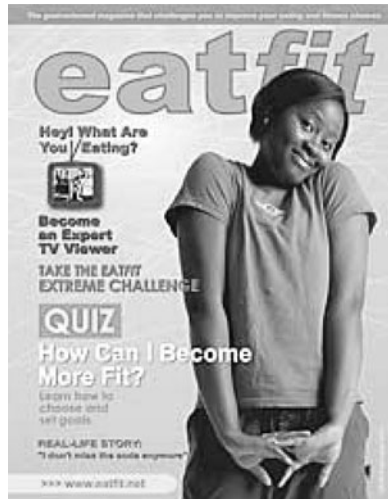


Figure. Workbook photograph.

- **Classroom curriculum for the teacher/leader.** The curriculum includes 9 experiential lessons that teach skills, provide goal performance feedback, practice behaviors, and motivate. The topics include dietary and physical activity goal setting, reading food labels, eating at fast food outlets, learning the physical activities, and understanding media influence.

The physical activity assessment has students examine their current fitness activity behaviors and guides them through goal setting and contracting. Each week, students track their eating and fitness goal progress. Incentives in the form of raffle tickets and prizes are used to motivate students. Each lesson is correlated to the California Department of Education Standards.

USE OF THEORY

Social Cognitive Theory (SCT) drove the development of the program, and each construct/strategy was used throughout the intervention (Table). Three SCT constructs are summarized here in more detail: self-efficacy, outcome expectancies, and self-regulation.

Each lesson provides students the opportunity to practice skills, receive encouragement, and establish social

support, that, in turn, increases self-efficacy. Many skill-building activities are included in the EatFit curriculum. Recipe preparation and tasting provide students with the opportunity to increase their self-efficacy for choosing and preparing foods that support their nutrition goal. Among the fitness lessons, activities are included that allow students to practice physical activity skills (eg, leg lunges, stretches). Practicing the skills in the classroom will increase students' self-efficacy so that they will be more likely to perform the physical activities outside the classroom.

The motivational construct, outcome expectancies (OE), refers to an adolescent's perception of the outcomes of a particular behavior and the value placed upon these outcomes.² We conducted focus group interviews with adolescents during the formative stages of intervention development and found that "improved appearance," "increased energy," and "increased independence" were the outcome expectancies identified by these youths. These motivators were coupled with nutrition and fitness behaviors and integrated throughout the curriculum so the students would know what to expect if they met their eating and physical activity goals.

The third SCT construct, self-regulation, has multiple components: self-monitoring, goal setting, barrier counseling, and reinforcement. The EatFit curriculum promotes self-monitoring through personal dietary and physical activity assessments. Based on the assessment, students set goals and then monitor their goal progress. Once they accomplish their goals, they have the opportunity to set progressively more complicated goals. Rewards or positive reinforcements are provided for goal attainment. Throughout the intervention, students engage in problem-solving activities that discuss hypothetical and personal barriers to improving nutrition and fitness. For example, fast-food restaurants are presented as potential barriers to dietary goal attainment. Students participate in an activity that provides them with the skills to choose fast foods that support the attainment of their nutrition goals.

EVALUATION

This education intervention was pilot tested with 34 middle school students who were Expanded Food and Nutrition Education Program (EFNEP) participants.³ Data from self-reported recall instruments indicated that students made positive changes in dietary behaviors (41%), dietary self-efficacy (29%), physical activity behaviors (56%), and physical activity self-efficacy (26%). Seventy-four percent and 79% of the students rated themselves as making one lasting improvement in their dietary and physical activity behaviors, respectively.

NOTES

The EatFit program received the 2003 Dannon Institute Award for Excel-

lence in Community Nutrition. EatFit is available for purchase at <<http://anr.catalog.ucdavis.edu>> or by telephone at (800) 994-8849.

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Table. Examples of Integration of Social Cognitive Theory into EatFit

Construct/Strategy	Integration of Social Cognitive Theory into Intervention
Self-efficacy/ skills mastery	Students increase their self-efficacy in choosing foods that meet their selected dietary goals. They learn how to read food labels and practice those skills by answering questions on dozens of foods that are specific to their goals.
Modeling	Students interview a parent or guardian about their goal-setting experiences.
Barriers counseling	During the parent interview, students ask about barriers/hurdles encountered during parent's goal progress and the resolution of those hurdles.
Self-monitoring	Students complete self-assessments of current dietary and fitness practices.
Goal setting	Students set physical activity goals using the results from the self-assessments.
Contracting	Students complete contracts for their dietary and fitness goals. This contract specifies the goal, the motivation for attainment, and space for signatures from the student, friend, and parent.
Cue management	A teacher-led discussion asks, "What are some negative cues that may prevent you from reaching your fitness goal?"
Social support	To strengthen social support networks, students are placed into groups based on chosen goals.
Reinforcement	Students receive raffle tickets for goal attainment.
Cognitive restructuring	By restructuring the way students think about breakfast, options open up for their morning meal such as leftover pizza or a microwaveable burrito, and thus make breakfast easier to obtain.
Relapse prevention	The student workbook includes a section devoted to helping students maintain, set, and achieve new goals after the completion of the intervention.
Environment/reciprocal determinism	Homework assignments focus on the role of the environment on behavior change. For example, students identify 5 locations where they could exercise after school, hours of operation, and cost. Students find one food from an on-campus source that meets their dietary goals.