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# **Eat Smart, Move More, Weigh Less a Weight Management Program for Adults—Revision of Curriculum Based on First-Year Pilot**

**Carolyn Dunn**

Professor and Nutrition Specialist  
North Carolina Cooperative Extension  
North Carolina State University  
Raleigh, North Carolina  
[Carolyn\\_Dunn@ncsu.edu](mailto:Carolyn_Dunn@ncsu.edu)

**Kathryn M. Kolasa**

Professor  
Brody School of Medicine  
East Carolina University  
University Healthy Systems of Eastern Carolina  
Greenville, North Carolina  
[KolasaKA@ecu.edu](mailto:KolasaKA@ecu.edu)

**Sheree Vodicka**

Healthy Weight Communications Coordinator  
Physical Activity and Nutrition Branch  
North Carolina Division of Public Health  
Raleigh, North Carolina  
[Sheree.Vodicka@ncmail.net](mailto:Sheree.Vodicka@ncmail.net)

**Lori Schneider**

Physical Activity Specialist  
Physical Activity and Nutrition Branch  
North Carolina Division of Public Health  
Raleigh, North Carolina  
[Lori.Schneider@ncmail.net](mailto:Lori.Schneider@ncmail.net)

**Cathy Thomas**

Branch Head  
Physical Activity and Nutrition Branch  
North Carolina Division of Public Health  
Raleigh, North Carolina  
[Cathy.Thomas@ncmail.net](mailto:Cathy.Thomas@ncmail.net)

**Christine Smith**

Family and Consumer Sciences Agent  
North Carolina Cooperative Extension  
Goldsboro, North Carolina  
[Christine.Smith@ncsu.edu](mailto:Christine.Smith@ncsu.edu)

**Carolyn Lackey**

Professor Emeritus  
North Carolina Cooperative Extension  
North Carolina State University  
Raleigh, North Carolina  
[Carolyn\\_Lackey@ncsu.edu](mailto:Carolyn_Lackey@ncsu.edu)

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**Abstract:** Eat Smart, Move More, Weigh Less (ESMMWL) is a 15-week weight-management program that is delivered by local educators. Published research data were used to identify strategies that lead to weight loss and/or weight maintenance. The program uses the Theory of Planned Behavior by informing, empowering, and motivating participants to live mindfully as they make choices about eating and physical activity. The program provides opportunities for participants to keep a journal of healthy behaviors. ESMMWL is offered in worksites, faith communities, and county extension offices. The program was pilot tested and revisions were made. This article updates the earlier description.

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## Introduction

The issue of overweight and obesity continues to be the most pressing public health problem of our time (Ogden, Carroll, McDowell, Tabak, & Flegal, 2006; Flegal, Graubard, Williamson, & Gail, 2005). An estimated 50% of adults attempt to lose weight or not gain weight each year. However, most people do not follow recommendations for calorie restriction and adequate levels of physical activity (Weiss, Galuska, Khan, & Serdula, 2006).

North Carolina, like many other states, has a plan to prevent overweight, obesity and related chronic diseases (Caldwell et al., 2006). To achieve the goals of the state plan, accessible and affordable, family-based, culturally relevant, and interdisciplinary weight management services for adults are needed. Local educators need materials that address weight management that are built on accurate content (Lohse & Stotts, 2006). The ESMMWL curriculum was created in response to meet this demand and to develop a comprehensive, low-cost weight loss/weight maintenance curriculum for adults that could be widely implemented across the state by trained professionals.

## Program Description

The Eat Smart, Move More, Weigh Less (ESMMWL) weight-management curriculum was created by a team of interagency professionals with expertise in nutrition, physical activity, and behavior change. Published research data were used to identify strategies that would lead to weight loss and/or weight maintenance. These included eating fewer calories; including more fruits, vegetables, and whole grains in meals; eating breakfast regularly; controlling/decreasing portion sizes; eating more meals at home; drinking fewer calorie-containing beverages; keeping a food/physical activity record; increasing physical activity; and watching less television.

The above strategies were used to develop 19 ESMMWL lessons (Dunn, Kolasa, Vodicka, Schneider, Thomas, Smith, & Lackey, 2010). In 2009, the 19 lessons were consolidated into 15 lessons in response to

feedback received by the local instructors indicating that 19 weeks of the program was longer than what most community members would participate in. No lessons were omitted; however, several lessons that contained similar strategies were combined, or the behavior was incorporated into several lessons. For example, Enjoy More Vegetables and Enjoy More Fruits were combined into one lesson. Similarly, Move Strong and Move Forward were combined, and Eat Out Less and Eat Less Fast Food lessons were combined. Information from Enjoy More Whole Grains was split among a few lessons. Figure 1 lists the original 19 and current 15 lesson topics. In addition to consolidation of lessons, lesson content was updated to reflect the most recent research and national recommendations. At this time the program evaluation form was also revised and a program Website was launched <[www.ESMMWeighLess.com](http://www.ESMMWeighLess.com)>.

**Figure 1.**  
Lesson Titles

Original Lessons:

Lesson Titles	
1. Introduction	10. Eat Less Fast Food
2. Make Your Commitment	11. Move Strong
3. Re-Think Your Drink	12. Enjoy More Fruits
4. Eat Fewer Calories	13. Start Smart
5. Move More	14. Move Forward
6. Check the Facts	15. Keep Your Commitment
7. Enjoy More Vegetables	16. Eat Out Less
8. Right-Size Your Portions	17. Tame the Tube
9. Plan, Shop, Fix and Eat	18. Pack Smart Lunches
	19. Enjoy More Whole Grains

Current Lessons:

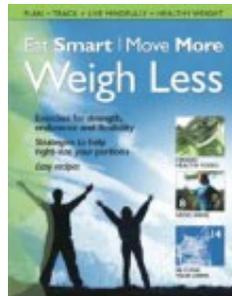
Lesson Titles	
1. Introduction	9. Plan, Shop, Fix and Eat
2. Make Your Commitment	10. Eat Out Less
3. Re-Think Your Drink	11. Move Strong
4. Eat Fewer Calories	12. Start Smart
5. Move More	13. Tame the Tube
6. Check the Facts	14. Pack Smart Lunches
7. Enjoy More Fruit and Vegetables	15. Keep Your Commitment
8. Right-Size Your Portions	

The curriculum is presented in electronic and hard-copy format and includes speaker notes, PowerPoint presentations, evaluation instruments, and marketing materials. ESMMWL uses the Theory of Planned Behavior (Ajzen, 2002). Each lesson 1) discusses a behavior and its importance to the participant's goal of weight loss or weight maintenance; 2) shows how others, including family members, can support the participant in adopting the behavior; and 3) provides strategies for adopting the behavior, empowering the participant to attempt the identified behavior.

Additionally, each lesson includes a "family spotlight" describing ways the entire family can adopt the behavior, opportunities for sharing and celebrating success, and tips for a guided discussion about the behavior. The curriculum also includes information and strategies to live mindfully, paying attention to the events, activities, and thoughts that make up participants' lives. Participants are asked to eat with awareness, to be attentive to how they move, and to do things consciously rather than out of habit. Participants are asked

to track their mindfulness, physical activity, weight, and the food and beverages consumed in a journal that is provided. Participants also receive a full-color, 35-page magazine that contains key points from each lesson, recipes, sample physical activity routines, and their personal record-keeping instrument for each week of the program (Figure 2). The state Cooperative Extension Service produces the ESMMWL magazines and journals to ensure quality and to keep cost low (\$3.50 per magazine, \$1.00 per journal). The program magazine was revised and reprinted in 2009 to keep the information current and reflect the most current research.

**Figure 2.**  
Eat Smart, Move More, Weigh Less Magazine



ESMMWL is delivered in group settings such as faith communities, worksites, civic clubs, or other groups organized specifically for this purpose (e.g., weight loss class at a physician's office). During the pilot, the local provider determined the number of weeks that best suited the group's interests and needs. ESMMWL groups usually meet once a week for a 45- to 60-minute educational/motivational program and personal goal assessment. Some include physical activity time. Each participant sets a healthy-weight goal, which may be a steady loss of weight or maintenance of current weight. Weight-loss goals must be in the range of a recommended safe weight loss of 1/2 to 2 pounds per week, in keeping with the North Carolina Administrative Code Title 21, Chapter 17, Section .0200, which regulates weight management programs for safety.

A physician-quality, beam-balance scale, or high-quality digital scale is placed in an accessible place for the group, with reasonable privacy for weigh-ins. Participants weigh weekly and record their weight in their Personal Record. Blood pressure and waist circumference are measured and recorded at the beginning and end of the program by trained personnel. A program fee is determined locally and is kept to a minimum to encourage participation by a broad population. Costs usually range from \$0-\$50 for the entire series.

Incentives such as receiving a portion of their registration fee back for successful completion, employer approved time off from work, water bottles, t-shirts, or other small give-a-ways have been used to encourage weekly attendance, completion of the program, and working towards weight loss/weight maintenance goals.

## Dissemination

Potential program instructors include agents with North Carolina Cooperative Extension (agents) and Health Promotion Coordinators with local health departments (HPC) who attended a required training in fall of 2007. The daylong training included in-depth information about weight loss strategies, the Theory of Planned Behavior, and how the ESMMWL program could be implemented in their county. Agents and HPC from the same or nearby communities were encouraged to work together to develop a delivery strategy for ESMMWL for their area.

A second training using the finalized curriculum was offered for all existing and new instructors in late 2009 that included information on curriculum updates and content to reflect the most current research. This training was presented in an online format. Participants were required to complete five online modules prior to participating in a 2-hour long live webinar. A copy of the updated curriculum was provided free of cost to those participants that were previously trained and a \$100 fee was charged for new instructors. The training modules and recorded webinar continue to be available for instructors as they express interest in getting trained and offering the program in their community. An up-to-date listing of trained instructors for all North Carolina counties is available on the program website to help interested people locate instructors in their area <[www.ESMMWeighLess.com](http://www.ESMMWeighLess.com)>.

## Impact

Experts in the areas of nutrition, physical activity, and weight loss developed ESMMWL. All materials were peer reviewed by a broad group of health and nutrition education professionals at the national, state, and local level. Suggestions from their review were incorporated into the final version of the materials.

The need for a low-cost, comprehensive weight management curriculum is evident based on the response to the program thus far. Correspondence with local educators delivering the program indicate that there is a high level of interest in the program and that participants are responding favorably to the content and delivery method. In the first 18 months of the program, 101 ESMMWL courses were delivered in 48 of 100 NC counties by local educators, with 1,162 participants completing the course. Most participants lost weight at a safe rate and reported changes in mindfulness and in eating and physical activity behaviors known to lead to weight loss and maintenance. Additional details from the pilot are available from the authors. The high interest in the program across the state has prompted additional agencies requesting training in the curriculum for dissemination to an even larger audience.

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