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Eating disorder prevention curriculum for parents of elementary school children

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EATING DISORDER PREVENTION CURRICULUM
FOR PARENTS OF ELEMENTARY SCHOOL CHILDREN

A Thesis

Presented to

The Faculty of Nutrition and Food Science

San Jose State University

In Partial Fulfillment

of the Requirements for the Degree

Master of Science

By

Kathryn Fosselius

August 2006

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Abstract

EATING DISORDER PREVENTION CURRICULUM FOR PARENTS OF ELEMENTARY SCHOOL CHILDREN

by Kathryn Fosselius

The purpose of this thesis was to determine the effectiveness of an eating disorder prevention curriculum for parents of elementary school children. Twenty-six participants completed workshops covering eating disorders, nutrition and exercise, and strategies for reaching goals. Before, following, and three months after the intervention, participants completed an assessment measuring attitudes and behaviors regarding body image, eating, and exercise, and communication with their children on these topics.

An increase in body satisfaction and a decrease in thoughts about food, dieting, and purging were observed following the intervention. Participants became less likely to tell their children to avoid “bad” foods. These effects did not remain significant at follow-up. The findings indicate that an eating disorder prevention program for parents has the potential to positively impact children. Future studies should be conducted in which the program length is expanded, and a maintenance component is added to provide ongoing practice of learned skills.

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I cannot say enough about the support I have received from Dr. Clarie Hollenbeck throughout the process of putting this research together. He has seen me through every phase of its existence, and put more hours into its development than he probably ever planned. I thank him for his expertise in research and interpretation of statistical findings; for the many hours of planning, answering questions, and sharing ideas he gave to this project; and for his belief in me, as well as his friendship, both of which often sustained me when I struggled.

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Preface

The journal article was written and formatted according to the publication guidelines outlined by the *Journal of Nutrition Education and Behavior*. The remainder of the project was written according to the Publication Manual of the *American Psychological Association* (6th edition, 2002).

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CHAPTER ONE

INTRODUCTION AND REVIEW OF THE LITERATURE

Introduction

Eating disorders, including anorexia nervosa, bulimia nervosa, and binge eating disorder, are dangerous pathologies that lead to life-threatening physical and psychological symptoms. Although eating disorders can sometimes be managed by psychotherapy, medications, or nutritional therapy, treatment has been shown to produce symptom remission in only 40-60% of patients (Stice and Shaw, 2004). Therefore, determining successful means of preventing these disorders would be the most effective way to prevent morbidity and mortality associated with them.

Unfortunately, a common finding among researchers of various types of current eating disorder prevention programs is that the small successes that are achieved at the end of the curriculum are not maintained by the time of follow-up (Neumark-Sztainer, Sherwood, Collier, & Hannan, 2000; Wade, Davidson, & O'Dea, 2003). The fact that this result holds true regardless of program content, age of participants, or target audience indicates that short-term interventions are sometimes able to make an impact on students, but enduring outside influences tend to diminish these effects. In a society that emphasizes thinness and values external beauty, it is often difficult for young people to maintain their self-esteem and body satisfaction.

Consequently, a more effective means of reaching young people may be to extend prevention programs to include communities, schools, and families. If future interventions can effect system-wide changes so that students receive the same positive, healthy messages in the classroom, on the playground, and at home, then perhaps the achievements of these programs will manage to endure well beyond a three-month

follow-up period. Because messages related to eating and self-concept are learned first at home, and because parents have been shown to provide a significant influence on children's dietary habits and self-esteem, upcoming prevention programs should be designed to include family education. This type of intervention may eventually prove to be a first step in creating the large-scale change necessary to alter societal messages relating to weight and food, and to ultimately eradicate eating disorders.

To investigate this hypothesis, an eating disorder prevention curriculum for parents of elementary school children was created. The first purpose of the study was to determine the effectiveness of this curriculum on promoting positive personal attitudes regarding eating and body shape/size among parents. The second purpose was to determine the effectiveness of the curriculum on altering messages parents deliver to, as well as behaviors observed by, their children relating to food and body acceptance.

Research Question

Will participation in an eating disorders prevention intervention increase:

- participants' understanding of healthy eating behaviors?
- participants' perception that their attitudes and eating patterns can affect those of their children?
- participants' ability to identify appropriate goals and strategies for their children's health and fitness, and their rejection of the thinness ideal?

Operational Definitions

Anorexia Nervosa. A condition in which the patient refuses to maintain an appropriate body weight, harbors an intense fear of becoming fat, and has a distorted self-

perception of personal body size. In females, loss of menstruation occurs. This condition is clinically defined by the *Diagnostic and Statistical Manual of Mental Disorders, 4th edition* (DSM-IV) (American Psychiatric Association, 2000).

Bulimia Nervosa. A condition in which the patient repeatedly eats a large amount of food in a short period of time, and subsequently tries to rid the body of the excess calories through some type of compensatory behavior (typically self-induced vomiting, excessive exercise, or abuse of laxatives, diuretics, or diet pills). During the binge episodes, the patient experiences a lack of control. The patient also struggles with intense body dissatisfaction. This condition is clinically defined by the DSM-IV (American Psychiatric Association, 2000).

Binge Eating Disorder. A condition in which the patient repeatedly eats a large amount of food in a short period of time, with no subsequent compensatory behavior. During these episodes, the patient experiences a lack of control as well as psychological distress about overeating. This condition is currently considered an “eating disorder not otherwise specified,” which is clinically defined by the DSM-IV (American Psychiatric Association, 2000).

Disordered eating. Unhealthful eating behaviors or weight-loss methods (such as bingeing, purging, or fasting) in people who do not meet the criteria to be clinically diagnosed with any of the eating disorders defined by the DSM-IV (Haines, Neumark-Sztainer, Eisenberg, & Hannan, 2006). This is not a clinically defined term.

Review of the Literature

Appropriate Content of Prevention Programs

One strategy in the development of eating disorder prevention curricula involved educating participants on the dangers of dieting, unhealthful weight practices, and eating disorders. Early studies, such as those conducted by Killen and colleagues (1993) and Smolak, Levine, and Schermer (1998), indicated that subjects' knowledge regarding eating disorders and unhealthful eating was significantly increased by these types of programs, but that behaviors such as unhealthful eating patterns were not affected. Carter, Stewart, Dunn, and Fairburn (1997), after conducting eight weekly sessions using this tactic, went so far as to suggest that primary prevention of eating disorders might "do more harm than good." This suggestion was precipitated by the fact that dietary restraint of participants had increased by the time of follow-up, six months after the intervention.

Because no control group was used in the study conducted by Carter et al., it is impossible to determine whether the intervention was, in fact, the cause for the rise in dieting among participants. Since research indicates that nearly 60% of female adolescents have dieted for weight loss (Austin, 2001), it is entirely possible that the 13- and 14-year-old girls involved in this study would have begun dieting within this time frame regardless of the intervention.

Another finding of the study was that prior knowledge regarding eating disorders and the effects of dieting was unrelated to dietary restraint following the program (Carter et al., 1997). If knowledge of eating disorders and the dangers of dieting are unrelated to later development of dieting behaviors, then it would seem unlikely that educating people

on these topics would be an effective method of prevention. Perhaps one problem with this intervention strategy is that these researchers focused on scare tactics, aimed solely at reminding participants why certain behaviors might be dangerous and should therefore be avoided. What was lacking in this program was the suggestion of alternatives to these behaviors, and opportunities for participants to strategize more healthful eating and exercise patterns.

More recent programs have aimed to decrease eating disorder risk factors by teaching participants about self-esteem and body acceptance. The effectiveness of a prevention program titled “Full of Ourselves: Advancing Girl Power, Health, and Leadership” was analyzed by Steiner-Adair and colleagues in 2002. This curriculum worked to heighten the self-esteem and body appreciation of 12- to 14-year old females, and also incorporated activities on media literacy and nutrition basics. The results showed an increase in knowledge among participants. Also, although body esteem among participants did not increase after the intervention, it did not decrease either, as it did for members of the control group. Still, no other measures (including eating behaviors or self-esteem) were affected. These lackluster findings led the authors to suggest that future programs should place more emphasis on behavior change.

This idea of empowering participants with skills was not, however, a new one. In 2000, Neumark-Sztainer et al. designed a study to evaluate the impact of “Free to Be Me,” a program which focused heavily on teaching and putting into action media literacy skills. In their research, 226 Girl Scouts, with a mean age of 10.6 years, attended six 90-minute lessons and participated in weekly take-home activities during the course of the

program. The results showed no significant effect on dieting behaviors. Small changes in body acceptance and perceived weight status were observed at post-intervention, but these variations were not maintained at the three-month follow-up.

Wade et al. (2003) implemented an intervention that was essentially a media literacy program. Participating eighth graders were involved in activities designed to empower them as critical media viewers and consumer activists. The intervention led to a statistically significant impact on weight concern immediately following completion of the program, which was not upheld by the time of the three-month follow-up. Other risk factors (shape concern and dietary restraint) were unaffected by the intervention.

In a meta-analysis of eating disorder prevention programs conducted by Stice and Shaw in 2004, the authors determined that the content of the curriculum was less of a factor for success than they had anticipated. Perhaps, then, other features of interventions, such as the age and group targeted, are more influential in determining the effectiveness of the programs.

Appropriate Age Group for Prevention Programs

Body dissatisfaction, dietary restraint, and disordered eating begin in childhood and increase as youths enter adolescence (Wade et al., 2003). Austin (2001) quotes a study conducted by Maloney et al. in 1989, which found that 40% of third-grade girls and 31% of third-grade boys wanted to be thinner. Further results showed that 28% of the girls and 36% of the boys in this study had reportedly already tried to lose weight. Although figures regarding the weight status and BMI of the children were not reported, this study predates the current American obesity epidemic, and it is unlikely that the

majority of these young people were truly overweight. Eating disorders may be particularly dangerous for children, due to long-term effects on the body while it is still growing, low total body fat of children, and the high susceptibility of children to dehydration (Childress, Brewerton, Hodges, and Jarrell, 1993). For this reason, many prevention programs have been aimed at younger participants.

In 1993, Childress et al. published findings regarding a survey they conducted using the Kids' Eating Disorders Survey (KEDS). Using a sample of 3,129 fifth through eighth grade students, the authors found that over 40% of participants believed they looked fat to others and wanted to lose weight. Results showed that 31.4% of the students had dieted and 32.6% had exercised for weight loss. Also, 2.4% of the participants had used diet pills, 1.5% reported using diuretics and 1.5% had used laxatives, all for the purpose of weight loss (no mention was made by the authors as to whether any of these weight loss methods were prescribed for the students by health care professionals). Furthermore, 4.8% of the respondents indicated that they had forced themselves to vomit in order to lose weight, and 16.2% had experienced episodes of what they considered to be binge eating. There were no significant differences by grade in student responses, indicating that risk factors are present in substantial numbers as early as fifth grade.

Thompson, Rafiroiu, and Sargent (2003) surveyed 3,151 third, fifth, eighth, and eleventh grade students regarding weight concern, weight management, body satisfaction, and perceptions of friends' and family members' weight concerns. According to their responses, even the third graders were using exercise, dieting, pills, and self-induced

vomiting to lose weight. The authors concluded that interventions should possibly begin as early as the third grade.

When Byely, Archibald, Graber, and Brooks-Gunn (2000) studied the effects of negative familial influence on poor body image in 10- to 14-year-old girls, they found a strong correlation at the beginning of their study. However, after a one-year follow-up, family relations did not prove to be a significant predictor of the emergence of new body image concerns. The authors concluded that their results imply “that familial factors that are most influential in affecting body image problems in girls may be set in motion early in adolescence or perhaps even in preadolescence” (Byely et al., 2000, p. 162). Bruning, Winzelberg, Abascal, and Barr (2004), who worked with high school sophomores, similarly found that their internet-based intervention yielded little effect on students’ weight concern or dietary restraint. They postulated that this might be because student attitudes are too ingrained by this age, and that interventions might be more effective when students are younger.

In their meta-analysis of interventions, Stice and Shaw (2004) hypothesized that eating disorder prevention programs would show greater effects for groups of students 16 years old and above. They comment that since younger adolescents have lower rates of eating disorders, their presence in studies might cause a flooring effect in the results. Their findings did show that effects were often stronger in programs for older students. However, it is important to emphasize that the authors’ explanation indicates why effects of prevention programs for younger students are more difficult to perceive, but not necessarily more difficult to achieve.

Appropriate Target Audience for Prevention Programs

Current research indicates that the incidence of eating disorders is not limited to one ethnic or socioeconomic group as was once suspected (Bowden, 2003). Particularly as members of diverse ethnic groups become acculturated into American society, they begin to adopt the thinness ideal, which leads to the risk factor of body dissatisfaction.

Similarly, as dieting continues to become more mainstream in American culture, increasing numbers of people are exposed to this risk factor for the development of eating disorders. According to the Rose model (Rose, 1995, as cited in Austin, 2001), “a large number of people exposed to small risk will often produce more cases in a population than will a small number of people at large risk” (p. 274). Austin’s argument is that even a moderate amount of dieting can significantly increase one’s chances of developing disordered eating behaviors. This perspective would indicate that all young Americans exposed to the media could be considered part of the at-risk population, regardless of gender, ethnicity, or socio-economic background.

This is one of the reasons that some studies have suggested that prevention efforts be directed towards entire communities, involving school personnel, families, and community members. Steiner-Adair et al. (2002) concluded from their study that their “Full of Ourselves: Advancing Girl Power, Health, and Leadership” program might be more successful if it were incorporated across an entire grade, with involvement of school administrators, teachers, and parents. O’Dea and Maloney (2000) review the World Health Organization’s Health Promoting Schools Framework, which “outlines a holistic approach to foster health within a school and its local community” (p. 19). In this

environment, the school would organize cross-curriculum education to prevent disordered eating behaviors and implement school policies on meals, dress codes, and bullying that are sensitive to the issues of body image and eating disorders. The school would also form partnerships within the community, perhaps involving education of teachers, school health personnel, coaches, and families about eating disorder prevention.

Other researchers have sought to examine the relationship between familial influences and the development of eating disorders. The 3,151 students in the study conducted by Thompson et al. (2003) answered questions about perceived weight concern of friends and family. The authors determined that the “children and teens’ perceptions of family weight concerns accounted for ~17% of the variance for personal weight concern” (p.321). Mothers were reported as the most likely family member to provide information to children about weight loss, and so the authors concluded that future interventions might benefit from targeting mothers as well as children.

In their study of 77 10- to 14-year-old girls, Byely et al. (2000) found that there was significant agreement between mothers’ and daughters’ perceptions of daughters’ body size. As reported earlier, the authors also found that negative familial relations varied directly with negative body image among daughters, although family relations did not predict future development of dietary restraint. The authors suspected that this was because family influences had already made an impact on the girls’ body image at an earlier age. Also, the results of this study did not show maternal modeling to be a significant factor in the development of dieting behaviors. However, the authors commented that few of the mothers were overweight, which might have made this

measure more difficult to assess. Conversely, the results did show that social influence exerted by mothers (encouraging their daughters to diet) did have a significant impact on the daughters' dieting behavior.

Davison, Markey, and Birch (2000) surveyed 197 five-year-old girls and their parents regarding body satisfaction (desire to be thinner) and weight concerns (fear of weight gain, perception of personal fatness, diet history). The researchers discovered a significant correlation between the weight concern of mothers and that of their daughters, regardless of the girls' weight status or their level of body satisfaction. This suggests that mothers' negative self-perceptions and dieting habits can impact girls before they are even old enough to go to school.

Still, few prevention programs have yet been created to target families as well as young people. "Student Bodies" is an example of one program that attempts to reach youths and their parents. Bruning Brown et al. (2004) implemented the program for 102 female high school sophomores in northern California. Twenty-two of their parents were included in the parent component of the intervention. The curriculum of the program was presented online; parents were encouraged to be accepting of variations in weight and shape in their daughters, given tools to recognize symptoms of unhealthy eating, and taught communication skills to discuss weight issues with their daughters. Results indicated that daughters' perceptions that their parents value thinness was positively correlated to daughters' restrained eating. Sadly, only eleven of the parents actually logged into the program.

Involving Parents in Treatment Programs

Current research indicates that parents are an integral component in the treatment of young people already diagnosed with eating disorders. For instance, Robin and colleagues (1999) conducted a study that compared two types of treatment methods for female adolescents with anorexia nervosa. The thirty-seven subjects were randomly assigned to one of two treatment conditions. Nineteen girls were placed in the behavioral family systems therapy (BFST) condition, in which families met as a group and parents were encouraged by the therapists to take control of their children's eating habits. The eighteen remaining participants were seen individually, as part of ego-oriented individual therapy (EOIT). The participants' parents met separately with the therapists, but only half as often as their daughters, and these parents were urged not to get involved with their children's eating behaviors. While both types of treatment led to success in helping participants achieve a healthy weight and resume menstruation, more of the young ladies in the BSFT group achieved these goals, and they reached them more quickly than did their counterparts in the EOIT group.

However, it may prove most beneficial for young people with eating disorders to be in individual therapy, if their parents also receive frequent counseling sessions in which they are advised to become actively involved in their children's recovery. A randomized, controlled study comparing conjoint family therapy (CFT) and separated family therapy (SFT) studied the effects of these two types of treatment on forty anorexic patients and their families (Eisler et al., 2000). Therapists assured parents in both groups that they should play a role in helping their children to begin eating again. Results indicated that

participants were more likely to regain weight, resume menses, and be free of bulimic symptoms if they had been involved in the SFT treatment rather than the CFT treatment. These findings were shown to be statistically significant for families in which the mother tended to make critical comments of her child.

Further research has shown that parent involvement in the treatment of eating disorders can be done in a group setting. Twenty-five restrictive eaters were involved in a study examining the efficacy of family group psychoeducation in helping anorexics return to a healthy weight (Geist, Heinmaa, Stephens, Davis, & Katzman, 2000). Those assigned to the psychoeducation component of the study met in groups of up to seven families per session, and both patients and their parents were given the opportunity to evaluate their attitudes and behaviors, and devise strategies for change. The other participants and their families met in a traditional family therapy setting, focused on improving family communication and involving parents in the recovery process. Only one family met per session in this treatment. The researchers found that the two methods of treatment were comparably effective in assisting participants in restoring an appropriate weight. These results support the idea that involving parents in treatment of eating disorders helps promote recovery. Further, the findings suggest that working with parents in groups, which enables educators to reach many families at once, can be as successful as meeting with one family at a time (Geist et al., 2000).

Social Cognitive Theory and Involving Parents in Prevention Programs

The importance of involving parents in their children's recovery from eating disorders has been well demonstrated. Yet little research to date has attempted to

determine whether involving parents in prevention efforts would prove equally effective. However, the tactic of employing a parental component to other types of prevention education has been utilized.

Murray, Kelder, Parcel, and Orpinas (1998) developed learning objectives and instructional strategies for parents as an element of a larger violence prevention program aimed at middle school students. This portion of the program, called *Padres Trabajando por la Paz* (Parents Working for Peace), was created to supply parents with the information, skills, and self-reliance needed to recognize and help prevent potentially dangerous situations that their children might become involved with. The researchers worked with a focus group in order to determine how to best provide these tools to the parents in their study population.

In 2003, Lederman and Mian developed a curriculum for the prevention of sexually transmitted diseases and pregnancy in middle school children. The researchers chose to incorporate a parental education component into the program, believing that young people need a positive influence at home in order to “counteract powerful pressures for unsafe behaviors” learned elsewhere (Lederman & Mian, 2003, p. 36). The researchers also concluded that the best time to reach parents is while their children are preadolescent, since peers become increasingly significant in young people’s lives as they get older (Lederman & Mian, 2003).

Both of these programs were grounded, at least in part, in social cognitive theory (SCT) (Murray et al., 1998; Lederman & Mian, 2003). Based on the idea that personal beliefs, behaviors, and environment significantly impact each other, SCT “addresses both

the psychosocial dynamics influencing health behavior and methods for promoting behavioral change” (Baranowski, Perry, & Parcel, 2002, p. 165). The theory posits that people learn from their environment, including the people around them.

According to this model of learning, a successful educational program will incorporate changes in participants’ expectations regarding desired behaviors; offer opportunities for decision-making, goal-setting, and learning from others; increase learners’ confidence in their ability to change; and provide the participants with the knowledge and skills necessary to change their behavior (Baranowski et al., 2002). Using this model in prevention programs for parents enables mothers and fathers first to make changes in their own actions that will then alter the environment to which their children are exposed. Furthermore, these parents become empowered to help their children make different choices as well.

Conclusion

Although researchers continue to modify prevention programs for eating disorders, none have yet produced striking reductions in potential risk factors. A common finding among researchers of various types of prevention methods is that the small successes achieved at the end of the curriculum are not maintained by the time of follow-up. The fact that this result holds true regardless of program content, age of participants, or target audience indicates that short-term interventions are sometimes able to make an impact on students, but that enduring outside influences tend to drown out these effects. In a society that emphasizes thinness and values external beauty, it may be difficult for young people to maintain their self-esteem and body satisfaction.

For this reason, the most effective means of achieving long-term success may be to extend prevention programs so that they include communities, schools, and families. If future interventions can effect system-wide changes so that students receive the same positive, healthy messages in the classroom, on the playground, and at home, then perhaps the achievements of these programs will manage to endure well beyond a three-month follow-up period.

As risk factors such as weight concern, dietary restraint, and other unhealthful weight-loss methods continue to emerge in younger and younger children, specialists would do well to focus their efforts on students as early as in the third grade. Because messages related to eating and self-concept are learned first at home, and because parents (mothers, in particular) have been shown to provide a significant influence on children's dietary habits and self-esteem, upcoming prevention programs should be designed to include the education of families. This type of intervention may eventually prove to be a first step in creating the large-scale change necessary to alter societal messages relating to weight and food, and to ultimately eradicate eating disorders.

Such an intervention could be developed by drawing on successful eating disorder treatment programs involving families, as well as on parental programs aiming to prevent other types of dangers faced by young people. Through the use of Social Cognitive Theory in determining the objectives and educational strategies employed in this intervention, the program could be designed to impact the attitudes and actions of parents, the home environment they create for their children, and thus, in turn, the attitudes and actions of children.

To investigate this hypothesis, an eating disorder prevention curriculum for parents of elementary school children was created, and a study in order to determine its efficacy was conducted. The first purpose of the study was to determine the effectiveness of this curriculum on promoting positive personal attitudes regarding eating and body shape/size among the parents. The second purpose was to determine the effectiveness of the curriculum on altering the messages parents deliver to, as well as behaviors observed by, their children relating to food and body acceptance.

CHAPTER TWO
JOURNAL ARTICLE

Authorship

Eating Disorder Prevention Curriculum

For Parents Of Elementary School Children

We certify that we participated substantially in the conception and design of this work and the analysis of this data as well as the writing of the manuscripts. We have reviewed the final version of the manuscripts, approve it for publication, and take public responsibility for its content. Neither this manuscript nor one with substantially similar content under our authorship has been published or is being considered for publication elsewhere.

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Eating Disorder Prevention Curriculum

For Parents Of Elementary School Children

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**EATING DISORDER PREVENTION CURRICULUM
FOR PARENTS OF ELEMENTARY SCHOOL CHILDREN**

Research Briefs

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Abstract

Objective: To determine the effectiveness of an eating disorder prevention curriculum for parents of elementary school children.

Design: Comparison of pre-intervention, post-intervention, and follow-up responses of participants.

Setting: Three public elementary schools.

Participants: After volunteering to participate, 26 parents completed the study.

Intervention(s): Eating disorder prevention curriculum presented over four hours covering obesity, eating disorders, healthful nutrition and exercise, and strategies for parental support of children's goals.

Main Outcome Measure(s): Attitudes and behaviors regarding body image, eating, and exercise habits of participants and their children were assessed.

Analysis: Quantitative data were assessed to compare pre-intervention, post-intervention, and follow-up responses, using an alpha level of 0.10. Free-response comments were coded into categories.

Results: An increase in body satisfaction and a decrease in thoughts about food, dieting, and purging were observed following the intervention. The likelihood of participants telling their children to avoid "bad" foods decreased. These effects did not remain significant at three-month follow-up.

Conclusions and Implications: An eating disorder prevention program aimed at parents has the potential to positively impact children. Future studies should be conducted in which the program length is extended, and a maintenance component is added to provide ongoing practice of learned skills.

Key Words: eating disorders, education, nutrition, prevention

INTRODUCTION

Eating disorders, including anorexia nervosa, bulimia nervosa, and binge eating disorder, are dangerous pathologies that lead to life-threatening physical and psychological symptoms. Although eating disorders can sometimes be managed by psychotherapy, medications, or nutritional therapy, treatment has been shown to produce symptom remission in only 40-60% of patients (1). Therefore, determining successful means of preventing these disorders would be the most effective way to prevent morbidity and mortality associated with them.

Unfortunately, a common finding among researchers of various types of current eating disorder prevention programs is that the small successes that are achieved at the end of the curriculum are not maintained by the time of follow-up (2,3). The fact that this result holds true regardless of program content, age of participants, or target audience indicates that short-term interventions are sometimes able to make an impact on students, but enduring outside influences tend to diminish these effects. In a society that emphasizes thinness and values external beauty, it is often difficult for young people to maintain their self-esteem and body satisfaction.

Consequently, a more effective means of reaching young people may be to extend prevention programs to include communities, schools, and families. If future interventions can effect system-wide changes so that students receive the same positive, healthy messages in the classroom, on the playground, and at home, then perhaps the

achievements of these programs will manage to endure well beyond a short-term follow-up period. Because messages related to eating and self-concept are learned first at home, and because parents have been shown to provide a significant influence on children's dietary habits and self-esteem (4,5), upcoming prevention programs should be designed to include family education. This type of intervention may eventually prove to be a first step in creating the large-scale change necessary to alter societal messages relating to weight and food, and to ultimately eradicate eating disorders.

To investigate this hypothesis, an eating disorder prevention curriculum for parents of elementary school children was created. The first purpose of the study was to determine the effectiveness of this curriculum on promoting positive personal attitudes regarding eating and body shape/size among parents. The second purpose was to determine the effectiveness of the curriculum on altering messages parents deliver to, as well as behaviors observed by, their children relating to food and body acceptance.

DESCRIPTION OF THE INTERVENTION

Development of Curriculum

The primary author developed an eating disorder prevention curriculum aimed at the parents of elementary school children to teach participants about healthful eating, physical activity, and body image for themselves and their children. The objectives and educational strategies employed in this intervention were based on Social Cognitive

Theory. According to this model of learning, a successful educational program offers opportunities for decision-making, goal-setting, and learning from others and provides participants with the knowledge and skills necessary to change their behavior (6). These strategies have been successfully incorporated into parental components of programs aimed at preventing violence (7) and sexually transmitted diseases (8) among youth. Using this model in prevention programs for parents enables mothers and fathers first to make changes in their own actions that will then alter the environment to which their children are exposed. Furthermore, these parents become empowered to help their children make different choices as well.

Before collecting data for the study, the primary author presented the curriculum to a pilot group of twenty-four mothers as part of a parent education class. Following this initial workshop presentation, modifications were made to the curriculum and educational materials.

Participants

Participants were parents recruited through three public elementary schools in the Bay Area of California. Parents of children in elementary school, rather than middle or high school, were targeted due to findings that disordered eating behaviors have been commonly shown among children as early as 3rd grade (4), and this intervention intends to prevent these behaviors before they can begin. At two of the schools, parents volunteered to participate in the workshops after receiving flyers sent home by their children's schools. At the third school, the workshops were presented as part of classes

offered to parents through an Even Start Family Literacy Program. A total of 26 participants completed all sessions of the workshops as well as both pre- and post-data collection questionnaires. Thirteen of these participants completed the questionnaire at follow-up (50% response rate). Participants' ages ranged from 25 to 46 years (mean of 35 years), and self-reported weights ranged from 110 to 282 pounds (mean of 162 pounds). Those who chose to share their ethnicity identified themselves as Caucasian, Latina, African-American, or Asian. Although some men did attend portions of the curriculum, only females completed the program. Approval was received from the San Jose State University Institutional Review Board, and all participants provided informed consent prior to participating in the study.

Intervention

Participants attended a series of workshops totaling 4 hours in length (in 2 two-hour sessions one week apart or 10 days apart, or in 4 one-hour sessions conducted over 4 consecutive weeks, depending on the school site). During these sessions, the participants learned about appropriate nutrition and physical activity for themselves and for their families. Participants were briefly educated about what eating disorders are and how they develop. They were introduced to the idea that their own habits and comments can affect their children's body image, and to the concept that their personal rules or customs regarding eating could foster an unhealthy relationship between their children and food. Finally, participants were given opportunities to develop strategies for fostering healthy

eating, physical activity and body image in their children. The main workshop topics and activities are outlined in Table 1.

As suggested by the tenets of the Social Cognitive Theory, the activities integrated into the workshop curriculum required participants to put their learning into practice. Parents completed worksheets on setting health and fitness goals for themselves and for their children. They participated in small- and whole-group discussions regarding how to create a healthy home environment that encourages healthy physical activity and discourages the use of food as reward or punishment. Participants also practiced a role-play in order to strategize how to talk to their children about body image and weight concerns. Parents were given multiple opportunities to problem-solve on their own and to learn from the successes of their peers.

Measures

Prior to beginning the workshops and immediately following the completion of the curriculum, participants responded to a 2-page questionnaire. Approximately three months following completion of the workshops, the same questionnaire was mailed to participants to collect new responses.

Data were collected on participants' age, weight, and ethnicity, as well as their children's age and weight. Given a validated series of seven figural stimuli representing varying prepubertal body types (9), participants were asked to identify the build that most closely resembled that of their own child.

In order to assess changes in participants' attitudes and behaviors regarding personal body image, eating, and exercise, 19 items taken or modified from the validated Eating Disorders Inventory (10) were used. These items were measured on a six-point Likert scale ranging from "Never" (1 on the Likert scale) to "Always" (6 on the Likert scale). The same scale was used to measure an additional 15 items written expressly for this study in order to assess participants' attitudes and behaviors regarding their children's weight, eating, and exercise. Examples of these items include "I believe that my child is at a healthy weight," "I give my child a favorite food to cheer him/her up after a bad day," and "I am unsure how to talk with my child about his/her weight." These items were developed and modified with the advice of three health professionals specializing in the areas of eating disorders and/or obesity. Slight modifications were also made to some questions following the pilot intervention.

Finally, three free-response questions were included on the questionnaire in order to assess whether participants met the learning objectives of the curriculum. Possible appropriate answers to all of the questions were discussed during the course of the workshops.

Analysis of Results

The main quantitative effects of the intervention were assessed via SPSS at pre- to post-, pre- to three-month follow-up, and post- to three-month follow-up, using analysis of covariance (ANCOVA) in which participants' individual baseline scores were used as the

covariate. Due to the exploratory nature of this research, an alpha level of 0.10 was used for all statistical tests. Free-response comments were coded into categories.

EFFECT OF CURRICULUM ON PARTICIPANT RESPONSES AND COMMENTS

Effects on Attitude and Behavior

Findings indicated that the program had a statistically significant effect ($p < 0.10$) on responses to 10 of the 34 questionnaire items (see Table 2). Of the 19 questionnaire items assessing participants' attitudes and behaviors regarding personal body image, eating, and exercise, 9 were significantly altered. These reflected a decrease in thoughts about dieting, food, and wanting to be thin following the workshops. Feelings of guilt after overeating and thoughts about self-induced vomiting also decreased, while body satisfaction increased. Only one of the items used to assess participants' attitudes and behaviors regarding their children's weight, eating, and exercise was significantly impacted following completion of the curriculum. Participants were less likely to tell their children to avoid "bad" foods after participating in the workshops.

Particularly significant changes were observed on four of the measures. On the measure "I feel satisfied with the shape of my body," mean participant responses rose from 2.48 prior to the intervention to 3.21 following ($p = 0.031$). Conversely, the mean response to "I think that my stomach is too big" decreased from 4.04 before the

workshops to 3.42 after completion of the curriculum ($p=0.013$). A particularly significant impact was observed on participants' responses to "I think about wanting to be thinner." The mean decreased from 4.12 prior to the intervention to 3.21 following ($p=0.0001$). Finally, the parents' mean response to the item "I think about dieting" decreased nearly an entire point on the Likert scale from pre- to post-intervention, dropping from 3.81 to 2.88 ($p=0.009$).

However, none of these effects remained significant three months following completion of the intervention among the 13 participants who completed follow-up questionnaires (see Table 2). It should be noted that there were some significant differences at baseline between the groups who completed follow-up questionnaires and those who did not. Participants returning follow-up questionnaires were more likely than their counterparts to be reporting on daughters than on sons. Their responses at pre-intervention indicated that they were significantly less likely to think about dieting and wanting to be thinner, and more likely to feel satisfied with their body shape and stomach size prior to the workshops. They were also more likely to believe that their children were at a healthy weight. By the time of post-intervention, few of these differences remained. Those who eventually completed the follow-up questionnaire were still less likely than their counterparts to think about wanting to be thinner following the workshops. At this time, they also reported being less likely to tell their children to change their weight, as well as being less likely to feel that food controlled their lives.

Effects on Learning Objective Responses

In the free-response portion of the questionnaire, each participant was asked to identify remarks she could make that might affect her child's feelings about his/her body. Before, after, and three months following the intervention, common responses included either praising a child's looks ("I love you handsome little boys") or criticizing them ("you're too heavy" or "say she has a big booty"). Both at post-intervention and at follow-up, some participants suggested building a child's self-esteem through celebrating attributes not related to appearance ("compliment his abilities and talents" or "tell her she is beautiful on the inside and outside"). This category of responses was not seen at pre-intervention.

The second free-response question required each participant to list two goals she had for her child's health or fitness unrelated to weight. The types of answers remained relatively consistent through the three phases of data collection; goals of more healthful eating and increased exercise were the most common. One notable exception was that only after the workshops (both at post-intervention and at the three-month follow-up) did participants specify a goal of being active as a family. Another interesting finding was that one participant specifically changed her pre-intervention goal of "eliminate snacking before dinner" to a post-intervention goal of "limit snacking before dinner." Most significantly, the number of total answers to this item increased following the workshops. Those who had not listed any goals or listed only one goal pre-intervention were able to list two goals by post-intervention or by the time of the follow-up questionnaire, when completed.

A similar trend was noted for the third free-response question, for which each participant was to list three things she could do to help her child to eat and exercise healthfully. Again, those who had difficulty listing three appropriate responses prior to the intervention were able to do so following the intervention, as well as at the three-month follow-up period. Participants most commonly responded to this question by suggesting that they prepare and offer healthy foods to their children as well as become active as a family. Other interesting ideas included acting as a positive role model, discussing and praising healthy choices made by children, and making it fun to be active. One individual stated that she would support her children by giving them “autonomy to prevent eating disorders (less control).”

DISCUSSION

The goal of this study was to determine the effectiveness of a new eating disorder prevention curriculum for parents of elementary school children. One aim of the program was to promote positive personal attitudes regarding eating and body shape/size among the participants. Another was to alter the messages parents deliver to their children relating to food and body acceptance. The results indicate that the curriculum did make a significant impact on several aspects of participants’ attitude and behavior. Immediately following the workshops, participants reported spending less time thinking about food, dieting, and desiring to achieve the thinness ideal. Participants indicated that they were less likely to feel guilty after consuming large quantities of food, or to consider

self-induced vomiting as a means of weight control. After completion of the workshops, participants' reported body satisfaction, as measured by four separate questionnaire items, also increased. These results are encouraging, since previous studies have found that parents' weight concern, body dissatisfaction, and weight loss methods can lead to distorted body image and inappropriate weight loss behaviors in children (4,5). Therefore, if participants are less likely following the workshops to think and speak about their own bodies in negative terms, their children are less likely to view their own bodies with dissatisfaction. Similarly, if parents who have completed the curriculum spend less time dieting and working towards a goal of thinness, their children are likely to do the same. It should be noted that participants were encouraged throughout the workshops to adopt healthful eating and exercise behaviors, with a goal of achieving fitness and good health rather than a certain body size or shape.

The curriculum also led to a decrease in participants' telling their children to avoid "bad" foods. This finding is also encouraging. An important theme of the workshops was to avoid thinking of foods as inherently "good" or "bad." Similarly, participants were encouraged not to think of body parts or eating behaviors in these terms. This type of absolutist thinking is characteristic of people struggling with eating disorders, and can lead to rigid eating restrictions, self-indulgence, or guilt. For this reason, it is preferable that parents teach their children that all foods, in moderation, can fit into a healthy diet. Some of the comments listed in the free-response section of the questionnaire support the finding that participants' rigid thinking decreased following the intervention. One parent recognized that children do not need to "eliminate" snacking

before dinner in order to eat healthfully, as long as children choose appropriate snack foods. Another noted that asserting “less control” over her children would be a way to support them in making healthy choices. Focusing less on rules and allowing children more freedom to make their own choices is an important way parents can support their children in developing a healthy relationship with food. Perhaps most significantly, the increase in participants’ answers to the free-response items signifies an improved ability on their part to set goals and strategize support for their children. Therefore, participants gained skills necessary for altering their home environment as it relates to healthy eating and body image.

Unfortunately, the results of this study correspond with previous findings in which the positive effects of the intervention were not maintained by the time of follow-up. In this case, it is possible that the low return rate of the follow-up questionnaires was at least partially responsible for this result, particularly because those completing the follow-up questionnaires were more likely than their counterparts to report positive feelings about their own bodies and those of their children prior to the intervention. More importantly, this finding supports the theory that attitudes and behaviors regarding body image, eating, and exercise are well-ingrained by adulthood. Like their children, parents require more than a few hours of education and practice in order to become confident in their body satisfaction and ability to maintain weight and health appropriately. Since the workshops made an immediate impact on certain aspects of parent knowledge, attitude and behavior, continued sessions or some type of follow-up contact might reinforce learning and produce sustained change.

The most obvious limitation to this study was the small number of participants, particularly in the number who completed the follow-up questionnaire. Another was the lack of fathers in the data comparison. Although Thompson and colleagues found that the mother was the most likely family member to provide information to children about weight loss (4), both parents are responsible for creating a healthy environment in the home. The need to cover so much difficult material in only four hours represented another weakness in the research. If more time were available for participants to practice their new skills, a greater impact may have been observed. A final limitation to the study was its reliance on a sample of convenience. At two of the three schools, parents volunteered specifically to attend workshops about healthful eating and exercise for their children. It may be that these parents were already more attentive to these topics than the general population. Consequently they may have been more likely to practice appropriate interactions with their children regarding eating and exercise even prior to the intervention, rendering it more difficult to cause or show a change in the corresponding research measures.

IMPLICATIONS FOR RESEARCH AND PRACTICE

The results of this initial study indicate that an eating disorder prevention curriculum can be effective in changing parental attitudes and behaviors that have the potential to impact children's body image, eating, and exercise habits. Because the effects of the intervention were not maintained at the time of follow-up, future programs should

include a maintenance component, in which participants receive repeated opportunities to recall information and practice skills learned during the workshops over an extended period of time. This might be achieved through additional workshops, materials sent home with participants' children, or incorporating similar activities into school curriculum and encouraging students to discuss the information with their parents. The initial workshop curriculum could also be slightly expanded in order to provide more time for each agenda item. In order to ensure that findings of future studies can be generalized to the greater population, a larger, random sample should be utilized. If these trials prove effective, an eventual study that follows the children of participants through college to assess for the development of eating disorders would be indicated.

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Table 1

Curriculum outline for eating disorder prevention workshop for parents.

Main Topics	Main Activities
• What is a Healthy Weight?	• Group Discussion • Healthy Weight and Balanced Diet overheads
• How do We Stay Healthy and Fit?	• Tips for Being Healthy and Fit handout • Setting Goals & Strategies worksheet • Group Discussion
• Body Image	• Get Up and Move... activity and discussion
• Obesity	• Obesity overhead
• Eating Disorders	• Anorexia overhead • Bulimia overhead • Binge Eating Disorder overhead • Eating Disorders: How They Start overhead
• Question and Answer Session	• Group Discussion
• Sending Positive Body Image Messages	• Overhead and Group Discussion
• Helping Children Be Healthy and Fit	• Setting Goals & Strategies for Kids worksheet • Group Discussion
• Being an Active Family	• Tips and Group Discussion
• Choosing Meals & Snacks	• Tips and Group Discussion
• Setting the Right Environment	• Eating Expectations small-group discussion • Talking to Our Children role-play • Group Discussion

Table 2

Mean responses to significant questionnaire items on body image, eating, and exercise.

Questionnaire Item	Pre-	Post-	Follow- Up	p-value
I give too much time and thought to food.	3.04 2.75	2.57	3.08	0.069 0.594
I think that my stomach is too big.	4.00 3.31	3.42	3.77	0.013 0.213
I think about dieting.	3.79 2.92	2.88	3.15	0.009 0.686
I think that my thighs are just the right size.	3.00 3.45	3.50	3.55	0.062 0.810
I think that my stomach is just the right size.	2.13 2.92	2.67	3.08	0.062 0.721
I feel satisfied with the shape of my body.	2.61 3.36	3.22	3.64	0.031 0.539
I think about wanting to be thinner.	4.17 3.15	3.21	3.38	0.0001 0.584
I feel very guilty after overeating.	3.50 3.33	2.83	2.75	0.061 0.349
I have thought of trying to vomit in order to lose weight.	1.17 1.33	1.07	1.92	0.096 0.131
I tell my child not to eat certain foods that are "bad" for him/her.	3.57 2.85	2.77	2.69	0.086 0.753

Scale ranges from 1 ("Never") to 6 ("Always")

For each questionnaire item, the 1st row of means reflects responses of all participants and the 2nd row reflects only those of participants who completed the follow-up questionnaire

CHAPTER THREE

SUMMARY AND RECOMMENDATIONS

REFERENCES

Conclusion

Summary

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Recommendations

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APPENDIXES

Appendix A
IRB Letter of Approval

San José State
UNIVERSITY

**Office of the Provost
Associate Vice President
Graduate Studies & Research**

One Washington Square
San José, CA 95192-0025
Voice: 408-924-2427
Fax: 408-924-2477

E-mail: gradstudies@sjsu.edu
<http://www.sjsu.edu>

To: Kathryn Fosselius
1132 Carpentier St. #208
San Leandro, CA 94577

From: Pam Stacks, AVP
Graduate Studies & Research

Date: October 26, 2005

The Human Subjects-Institutional Review Board has approved your request for exemption from human subjects review under category "A" in the study entitled:

"Eating Disorder Prevention Curriculum for Parents of Elementary School Children."

This approval is contingent upon the subjects participating in your research project or the subject's data collected for the research project being appropriately protected from risk. This includes the protection of the anonymity of the subjects' identity when they participate in your research project and concerning all data that may be collected from the subjects. The Board's approval includes continued monitoring of your research to assure that the subjects are being adequately and properly protected from such risks. If at any time a subject becomes injured or complains of injury, you must immediately notify Pam Stacks, Ph.D. Injury includes but is not limited to bodily harm, psychological trauma, and release of potentially damaging personal information.

Please also be advised that all subjects need to be fully informed and aware that their participation in your research project is voluntary, and that he or she may withdraw from the project at any time. Further, a subject's participation, refusal to participate, or withdrawal will not affect any services that the subject is receiving or will receive at the institution in which the research is being conducted. This approval is granted for a one-year period and data collection beyond October 26, 2006 requires an extension request.

If you have any questions, please contact me at (408) 924-2480.

Cc: Clarie Hollenbeck

The California State University:
Chancellor's Office
Bakersfield, Channel Islands, Chico,
Dominguez Hills, East Bay, Fresno,
Fullerton, Humboldt, Long Beach,
Los Angeles, Maritime Academy,
Monterey Bay, Northridge, Pomona,
Sacramento, San Bernardino, San Diego,
San Francisco, San José, San Luis Obispo,
San Marcos, Sonoma, Stanislaus

Appendix B Research Consent Form

**College of Applied
Sciences and Arts**
Nutrition and Food Science
Central Classroom Bldg. 200
One Washington Square
San Jose, CA 95102-2058
Voice: 408-924-3100
Fax: 408-924-3114

Responsible Investigator: Kati Fosselius
Title of Protocol: Eating Disorder Prevention Curriculum for Parents of
Elementary School Children

1. You have been asked to participate in a research study investigating the effects of a newly-developed curriculum on promoting positive personal attitudes regarding eating and body shape/size among parents of elementary school children.

2. You will be asked to participate in a series of workshops held at your child's school. During those workshops, you will listen to information and participate in discussions and other activities. At the beginning of the 1st workshop and at the end of the final workshop, you will complete a short survey about eating attitudes and behaviors. You will be asked to complete this same survey three months after the workshop series has been completed.

3. For some people, discussions about food and weight as these topics relate to themselves and the rest of their family can be emotionally stressful. However, the discomfort you will feel during this study is not likely to be any greater than you might encounter in everyday life when talking or thinking about food and weight.

4. The benefits of participating in this study include learning new, healthy methods of managing your weight; the possible prevention of unhealthful eating and weight management habits in your child(ren); free resources regarding helping your child to maintain a healthy weight and a healthy body image; and free, healthy snacks during each of the workshop sessions.

5. Although the results of this study may be published, no information that could identify you will be included.

6. As compensation for participation in this study, you will receive free resources and snacks, as explained in item #4 of this letter.

7. Questions about this research may be addressed to Kati Fosselius at 408.924.3106. Complaints about the research may be presented to Dr. Lucy McProud, Chair, Nutrition and Food Science Department, San Jose State University, 408.924.3103. Questions about research subjects' rights, or research-related injury may be presented to Pamela Stacks, Ph. D., Associate Vice President, Graduate Studies and Research, at 408.924.2480.

Initial _____

The California State University:
Chancellor's Office
Bakersfield, Channel Islands, Chico,
Claremont, Fullerton, Fresno, Hayward,
Long Beach, Los Angeles, Maritime Academy,
Merced, San Bernardino, Pomona,
Sacramento, San Bernardino, San Diego,
San Francisco, San Jose, San Luis Obispo,
San Marcos, Sonoma, Stanislaus

8. No service of any kind, to which you are otherwise entitled, will be lost or jeopardized if you choose to “not participate” in the study.

9. Your consent is being given voluntarily. You may refuse to participate in the entire study or in any part of the study. If you decide to participate in the study, you are free to withdraw at any time without any negative effect on your relations with San Jose State University or with any other participating institutions or agencies, including your child’s school.

10. At the time that you sign this consent form, you will receive a copy of it for your records, signed and dated by the investigator.

The signature of a subject on this document indicates agreement to participate in the study.

The signature of a researcher on this document indicates agreement to include the above named subject in the research and attestation that the subject has been fully informed of his or her rights.

Participant Signature

Date

Investigator Signature

Date

Appendix C Workshop Questionnaire

Workshop Questionnaire

Identification Number:

Date

Your:

Gender:

Age:

Weight:

Ethnicity:

Your Child's:

Gender:

Age:

Weight:

Part 1

The following questions measure a variety of attitudes, feelings, and behaviors. Please read each question carefully and circle the number that applies best for you. THERE ARE NO RIGHT OR WRONG ANSWERS SO TRY VERY HARD TO BE COMPLETELY HONEST. YOUR ANSWERS ARE COMPLETELY CONFIDENTIAL. Thank You.

		Never	Rarely	Some- times	Often	Usually	Always
1	I like eating with other people.	1	2	3	4	5	6
2	I think about burning up calories when I exercise.	1	2	3	4	5	6
3	I give too much time and thought to food.	1	2	3	4	5	6
4	I think that my stomach is too big.	1	2	3	4	5	6
5	I get confused as to whether or not I am hungry.	1	2	3	4	5	6
6	I think about dieting.	1	2	3	4	5	6
7	I enjoy trying new, rich foods.	1	2	3	4	5	6
8	I think that my thighs are just the right size.	1	2	3	4	5	6
9	I eat when I am upset.	1	2	3	4	5	6
10	I think that my stomach is just the right size.	1	2	3	4	5	6
11	I exercise very hard to burn off calories.	1	2	3	4	5	6
12	I weigh myself several times a day.	1	2	3	4	5	6
13	I feel satisfied with the shape of my body.	1	2	3	4	5	6
14	I think about wanting to be thinner.	1	2	3	4	5	6
15	I feel very guilty after overeating.	1	2	3	4	5	6
16	I think that my thighs are too large.	1	2	3	4	5	6
17	I have thought of trying to vomit in order to lose weight.	1	2	3	4	5	6
18	I feel that food controls my life.	1	2	3	4	5	6
19	I eat very little in front of others and stuff myself when they're gone.	1	2	3	4	5	6
20	I believe that my child is at a healthy weight.	1	2	3	4	5	6
21	I compare my child's body to that of other children the same age.	1	2	3	4	5	6
22	I tell my child not to eat certain foods that are "bad" for him/her.	1	2	3	4	5	6
23	I believe that my child should go on a diet in order to lose weight.	1	2	3	4	5	6
24	I do not let my child have dessert if he/she did not finish all of dinner.	1	2	3	4	5	6
25	I am unsure how to talk with my child about his/her weight.	1	2	3	4	5	6
26	I want my child to exercise more in order to lose weight.	1	2	3	4	5	6
27	I tell my child not to eat snacks because they will ruin his/her appetite.	1	2	3	4	5	6
28	I feel that my child is not the right shape or weight.	1	2	3	4	5	6
29	I give my child a favorite food to cheer him/her up after a bad day.	1	2	3	4	5	6
30	I tease my child about his/her size or weight.	1	2	3	4	5	6
31	I tell my child that he/she must finish everything on his/her plate.	1	2	3	4	5	6
32	I feel satisfied with the shape of my child's body.	1	2	3	4	5	6
33	I tell my child that he/she should try to change his/her weight.	1	2	3	4	5	6
34	I feel comfortable talking to my child about his/her weight.	1	2	3	4	5	6

Please turn to the back for more questions.

Note: some questions taken or modified from the Eating Disorders Inventory (Garner, Olmsted, Polivy, 1983).

Part 2

Please circle the picture that you believe looks the most like your child looks in terms of weight and size. **THERE ARE NO RIGHT OR WRONG ANSWERS SO TRY VERY HARD TO BE COMPLETELY HONEST. YOUR ANSWERS ARE COMPLETELY CONFIDENTIAL.** Thank you.

Part 3

Please do your best to answer the questions below, which measure attitudes and knowledge about children's health and weight. **YOUR ANSWERS ARE COMPLETELY CONFIDENTIAL.** Thank you.

- 1) List 1 thing you could do or say at home that might affect your child's feelings about his/her body.

- 2) List 2 goals you have for your child's health or fitness that are not related to weight.

- 3) List 3 things **YOU** can do to help your child to eat and exercise healthfully.

Note: Figures shown in Part 2 designed and validated by Collins, 1991.

Appendix D
Workshop Day 1 Lesson Plan

Day 1 Lesson Plan

Set:

- Instructor introduces herself
- Share Agenda
- Go over questionnaire

Guided Learning:

- Ask learners to share their ideas: What is a Healthy Weight?

Instruction:

- Go over Healthy Weight overhead
- Go over Balanced Diet overhead
- Go over Tips for Being Healthy and Fit overhead
- Discuss the types of goals that are healthy, and give examples of strategies to reach them
 - What do we want our bodies to be able to do?

Independent Learning:

- Working with neighbors, learners fill out Personal Goals and Strategies Worksheet
- Learners share some of their ideas with the rest of the group

Guided Learning:

- Explain directions to “Get Up and Move” activity
- Learners switch seats with neighbors when sentences read are true for them.

Get Up and Move if You:

- Have ever thought media images use sexist stereotypes like men must be strong and women must be pretty.
- Have ever known someone you suspected might have an eating disorder.
- Have ever complained about how you feel fat, how you don’t like some part of your body, or how you wish you could change any part of the way you look.
- Have ever wished you could see more people like yourself in the media.
- Have ever been angry because of a comment someone made about your body.
- Have ever stopped someone from making a put down about someone else’s body.
- Have ever been on a diet.
- Have ever laughed at short jokes, tall jokes, fat jokes, thin jokes.
- Have ever gotten mad about short jokes, tall jokes, fat jokes, thin jokes.
- Have ever been told “you shouldn’t wear that because it makes you look fat.”
- Have ever been told that you’re good-looking but didn’t believe it.
- Have ever been told that you are good-looking and believed it.
- Have ever heard someone tease your child about his weight.
- Have ever heard your child say she wished she looked like someone in movies/TV.

- Discuss the activity.
 - How did it make them feel?
 - Which questions were true for the most people?
 - Who decides what the ideal body is?
 - How is it different for people of different cultures?
 - Where did you learn about beauty?
 - What is it like for our children?
 - Why is it important?

Instruction:

- Explain the link between poor body image and low self-esteem, as well as unhealthy weight management strategies.
- Go over Obesity overhead
- Go over Anorexia overhead
- Go over Bulimia overhead
- Go over Binge Eating Disorder overhead
- Go over Eating Disorders: How They Start overhead

Guided Instruction:

- What messages do our children hear from us about their bodies / size?
 - “Positive” or “negative” messages we send

Wrap-Up:

- Share next week’s agenda
- Hand out packets

Materials:

- Day 1 Overheads (9 pages)
- Kids’ FGP Overhead
- Overhead of Day 2 Agenda
- Copies:
 - Questionnaire
 - Consent Forms
 - Goals & Strategies Worksheet / Tips for Being Healthy and Fit
 - Activity/Further Reading Packet
 - Food

Welcome to Day 1 of **Preventing Obesity and Eating** **Disorders in Children**

Today's Agenda

- Complete Questionnaire
- What is a Healthy Weight?
 ACTIVITY: Share Your Ideas
- How do We Stay Healthy and Fit?
 - Tips
 ACTIVITY: Setting Goals & Strategies
- Body Image
 ACTIVITY: Get Up and Move...
- Obesity
- Eating Disorders

Filling Out the Questionnaire

1) What is My Identification Number?

My Phone Number: 483.3931

My Birthday: 06/04/75

My Identification Number: 393106

2) What if I have more than 1 child?

**Some of the questions are about YOU.
For the questions about your child,
think of your child who is closest to
7 years old.**

**You can then fill out a separate page for
each of your other children, if you like.**

Healthy Weight

What is a Healthy Weight?

Compared to overweight or obese, a body weight that is less likely to be linked to any weight-related health problems such as type 2 diabetes, heart disease, high blood pressure, or high blood cholesterol.

What's Important for a Healthy Weight:

- Body Composition – Fat vs. Lean Body Mass
- Adequate Exercise – at least 30 minutes daily
- A Balanced Diet – Food Guide Pyramid

What Isn't Important:

- Seeing a certain number on a scale
- Fitting into a certain clothing size
- Being the same size or weight as someone – anyone – else

Balanced Diet

What is a Balanced Diet?

A balanced diet includes a variety of foods from all 5 food groups. It should provide enough calories to ensure a desirable weight and should include all the essential nutrients that play an important part in keeping our bodies healthy. A balanced diet must contain these things in the correct proportions.

Tips for Being Healthy & Fit

- **Aim for the weight that is right for you.**
- **Make long-term success your goal.**
- **Start with small changes.**
- **Make it a family affair.**
- **Get moving.**
- **Follow the Food Guide Pyramid.**
- **Avoid fad or prepackaged diets.**
- **Eat less more often.**
- **Eat because you're hungry.**
- **Don't eat when you feel upset or bored.**
- **Choose healthy drinks.**
- **Allow ALL foods.**
- **Forgive yourself.**

Try to remember that losing weight isn't going to make you a better person - and it won't magically change your life. It's a good idea to maintain a healthy weight because it's just that: healthy.

Obesity

What It Is:

A condition of excessive fatness.

Signs to Look For:

- Eating Too Many Calories
 - Larger Portions
 - High-Calorie Foods
 - Fast Food Restaurants
- Inactivity
 - Too Much TV and Computer
- Unhealthy Weight Management

What Could Happen:

- Joint Problems
- Type 2 Diabetes
- Heart Disease
- High Blood Pressure
- High Blood Cholesterol
- Stroke

Anorexia

What It Is:

An eating disorder of extreme weight loss caused by self-starvation.

Signs to Look For:

- Distorted Body Image
- Weight Loss
- Fear of Gaining Weight
- Preoccupation with Food/Weight/Looks
- Rigid Rituals about Food
- Eating Alone
- Low Self-Esteem

What Could Happen:

- Problems with Digestion
- Bone loss
- Heart Disease (low blood pressure/heart rate)
- Loss of Menstrual Period (inability to have children)
- Can lead to Death

Bulimia

What It Is:

An eating disorder of bingeing (eating a large amount of food in a small amount of time) and purging (getting rid of the food by throwing up, using laxatives, diet pills, extreme exercise)

Signs to Look For:

- Scratched Fingers or Knuckles
- Irritated Throat
- Preoccupation with Food/Weight/Looks
- Denial of abnormal eating
- Often Spending Time Alone
- Low Self-Esteem

What Could Happen:

- Irregular Period
- Problems with Digestion
- Damage to or Loss of Teeth
- Rupture of Throat and Stomach Lining
- Heart Damage (Irregular Heartbeat)

Binge Eating Disorder

What It Is:

An eating disorder of uncontrolled eating with no purging afterwards.

Signs to Look For:

- Weight Gain
- Stomach Problems
- Eating When Not Hungry
- Eating Very Quickly
- Eating to Escape Emotions
- Eating Alone
- Low Self-Esteem

What Could Happen:

- Problems with Digestion
- Complications Associated with Obesity

Eating Disorders: How They Start

- Low Self-Esteem
- Perfectionism
- Feeling out of control of life
- Cultural values of appearance over inner self
- Social pressure to look a certain way
- Difficulty expressing emotions
- History of abuse
- History of being ridiculed about size or weight
- Mental illness or substance abuse in family

Building My Way to Health and Fitness

In each I will write one GOAL I have for MY OWN Health and Fitness.

These can be about how I feel, what I want to be able to do, or how my body can work.

They should NOT be about my weight or shape.

In each I will write one STRATEGY to help me reach the goal above.

These will be simple, specific things I can do to get me to my goal.

The diagram illustrates three separate goal-building structures. Each structure is composed of three cubes: two cubes at the base and one cube on top. Above each top cube is a cloud containing a goal label. The first structure is labeled 'Goal 1', the second 'Goal 2', and the third 'Goal 3'. The cubes are intended for writing strategies to achieve the goals.

Appendix F
Workshop Day 2 Lesson Plan

Day 2 Lesson Plan

Set:

- Share Agenda
- Write down 3 things you love about yourself that have nothing to do with your looks

Guided Learning:

- Discuss: was this difficult to do? How can you help your children feel good about what's inside and not emphasize feeling good about how they look outside? Can this help them be healthy?

Instruction:

- Go over Positive Body Image Messages overhead
- Explain how these ideas can help to set healthy goals for their children

Independent Learning:

- Working with neighbors, learners fill out Goals and Strategies for My Child Worksheet

Guided Learning:

- Learners share some of their ideas with the rest of the group
 - Focus on ways the whole family can get active
 - Focus on choosing healthy meals and snacks

Independent Learning:

- Working with neighbors, learners complete activity on Eating Environment at Home:
Setting Expectations
- Learners share some of their ideas with the rest of the group
- Instructor explains directions to role play activity
- In pairs, learners role play a scenario from the Body Image Environment at Home:
Responding to Negative Situations activity

Guided Learning:

- Discuss: what did you learn about responding to these situations? Which situation do you think would be the most difficult? What did other pairs find was successful in dealing with that particular situation? What did you feel went very well in your own role play?

Wrap-Up / Evaluation:

- Is there anything you wanted to cover that never came up?
- Complete questionnaire
- Address envelopes; add identification number to blank questionnaire
- Hand out packets

Materials:

- Day 2 Overheads (2 pages)
- Copies:
 - Questionnaire (x2 / participant)
 - Blank envelopes
 - Stamped envelopes with my address
 - Goals & Strategies for My Child Worksheet / Positive Body Image Messages
 - Eating and Body Image Environment at Home: Part 1
 - Eating and Body Image Environment at Home: Part 2
 - Activity/Further Reading Packet
 - Food

Welcome to Day 2 of Preventing Obesity and Eating Disorders in Children

Today's Agenda

- Sending Positive Body Image Messages
ACTIVITY: Share Your Ideas
- Helping Children Be Healthy and Fit
ACTIVITY: Setting Goals & Strategies
- Reaching Those Goals
 - Being an Active Family
ACTIVITY: Share Your Ideas
 - Choosing Meals & Snacks
ACTIVITY: Share Your Ideas
 - Setting the Right Environment
ACTIVITY: Eating Expectations
ACTIVITY: Talking to Our Kids
- Complete Questionnaire

Positive Body Image Messages

- **Be a Role Model For Health & Fitness**
 - Eat when you're hungry, stop when you're full
 - Exercise to feel good and be healthy
- **Avoid “Good” and “Bad” Thinking**
 - There are no good or bad foods
 - We are not good or bad depending on how much we ate or exercised
 - Bodies and body parts are not good or bad
- **Avoid Comments – or Compliments – about Weight or Size**
 - Your own
 - Others'
 - Don't allow any put-downs
- **Don't Use Food as a Reward – or Punishment**
 - Eating should be a positive experience
 - Eating is not a solution to problems
 - Food DOES NOT equal love!
- **Be Accepting of Yourself and Others**

Building My Child's Way to Health and Fitness

In each I will write one GOAL I have for My Child's Health and Fitness.
In each I will write one STRATEGY to help my child reach the goal above.
These will be simple, specific things I can do to support my child.

Goal 1

Goal 2

Goal 3

Eating and Body Image Environment at Home

Part 1 – Setting Expectations

This activity is designed to get you thinking about ways you can create a healthy eating and body image environment in your home. Please take a few minutes to write down your answer for each question.

1) Your child always asks for a favorite snack when he has had a bad day at school. How can you change this habit so that your child finds ways to cheer up that don't involve food?

2) You want to make sure that your family doesn't waste a lot of food. What are some expectations you can set with your family to keep them from wasting food that do not involve setting a rule that everyone must "clean her plate" at every meal?

3) Your child is often hungry after school, but you don't want him to spoil his appetite. What are some strategies you could use to make sure he eats dinner with the family but still is allowed to choose his own after-school snack?

4) You know that your child is heavier than she should be at her age and height. What are some ways you can help your child reach a healthy weight without putting her on a diet? What are some things you should try NOT to do or say?

Eating and Body Image Environment at Home

Part 2 – Responding to Negative Situations

You and your partner will take turns playing the role of the child and the role of the parent. Remember, the “child” chooses the scenario each time. At the end of the activity, we will discuss what we thought about each scenario.

SCENARIOS

- 1) Your child is teasing a friend or sibling about being fat.

- 2) Your child says he doesn't want to eat a certain food because his classmates told him it will make him gain weight.

- 3) Your child tells you that she wants to look like her favorite celebrity, and hates it that she does not.

- 4) Your child doesn't want to participate in a certain sport or other activity because he believes his teammates will make fun of his weight.

DIRECTIONS FOR ROLE-PLAY ACTIVITY

Step 1: Decide who is going to play the child first.

Step 2: That person will pick one of the 4 scenarios shown.

Step 3: The “child” begins the role-play by making a statement that fits the situation.

Examples:

Hey, Samantha, is that a dress or a tent?

Dad, I can’t ever eat pasta anymore because it will make me fat!

What do I have to do so that I’ll get a body like The Rock?

Mom, I don’t want to play softball anymore. I’m too fat and slow.

Step 4: The person playing the parent responds appropriately, and starts a conversation with the child that encourages healthy eating habits and body image.

Step 5: When time is up, switch roles. The “child” should pick a different situation this time.

Step 6: At the end of the activity, we will discuss what we discovered during each scenario.