

# Preventing weight-related problems in girls

**Dr Dianne Neumark-Sztainer** explains how the New Moves initiative at the University of Minnesota is bringing about positive changes in the lifestyles of sedentary adolescent girls

DR DIANNE NEUMARK-SZTAINER



## Could you begin with an overview of your work on this programme?

New Moves is an all-girl class focusing on healthy eating, physical activity, and social support designed to meet the needs of sedentary adolescent girls. New Moves aims to bring about positive changes in physical activity and eating behaviours to improve weight status and overall health, help girls function in a thin-orientated society and feel good about themselves, and help them avoid unhealthy weight control behaviours like skipping meals and using diet pills.

New Moves strives to provide a supportive environment where all girls feel comfortable being physically active and discussing weight-related issues, regardless of their size, shape, or level of physical activity. The philosophy underlying the New Moves approach is that if young people feel good about themselves, they will want to take care of their bodies through healthy eating and physical activity.

## Can you describe the results you have obtained from this study?

New Moves was very well received by the girls, teachers, and parents and has continued to be implemented in many of the schools that participated in the study. New Moves produced positive changes for several weight-related outcomes. As compared to girls in the control schools, girls in the New Moves intervention schools showed significant increases in body satisfaction; improvements in self-worth;

decreased use of unhealthy weight control behaviours; decreased sedentary behaviours and increased support from friends, family and teachers for healthy eating and physical activity.

## How do you think the successes and conclusions drawn from this study can be applied to future projects?

Physical education classes in schools have the potential to reach many young people. In addition to excessive body fat and obesity, unhealthy behaviours including inadequate physical activity, poor eating behaviours and unhealthy weight control practices are common among adolescents. It is important to understand and address the unique social and behavioural concerns of today's youth; for example, physical activity declines drastically during adolescence, with females becoming significantly more sedentary than males with a pattern that continues on into adulthood.

New Moves addresses the specific needs of adolescent girls. The curriculum teaches enjoyable physical activities that can be done outside of class, includes messages about healthy eating, promotes self-efficacy, addresses body image concerns and provides a supportive environment. In addition to being used in a physical education class at school, the programme could be used as a before or after-school programme, in local community centres, or incorporated into other existing programmes for adolescents, eg. Big brother/Big sister programmes, parks and recreations programmes, or health clubs.

## Do you believe media reports of an adolescent obesity crisis contribute to adolescents' body dissatisfaction and consequently to the increasing number of overweight and obese adolescents?

The media provides mixed messages. Girls are encouraged to overeat and be sedentary while at the same time remain thin. This promotes an unrealistic expectation of beauty and thinness and can lead to poor body satisfaction and girls feeling bad about themselves. The attention in the media on the high prevalence of obesity has both advantages and disadvantages for the

health of young people. On the one hand, it has increased awareness about obesity, its health consequences, and the importance of healthy eating and physical activity for weight maintenance and health promotion. On the other hand, it may lead to weight stigmatisation, body dissatisfaction, and increased unhealthy dieting behaviours, which research has found leads to weight gain over time.

## Is there anything further you wish to add?

Research suggests that New Moves fills a niche within the school system, meeting the needs of girls who do not feel comfortable in regular physical education classes, have sedentary lifestyles, and are at risk for weight-related problems like poor body satisfaction and use of unhealthy weight control behaviours. Students, parents and teachers liked the class and the New Moves approach produced many positive results related to physical activity, healthy eating and improvements in girls' body image and feelings of self-worth. It is important to consider comprehensive and integrated approaches when implementing programmes for the prevention of obesity and other weight-related issues in youth. Continued efforts should be made within school food and physical activity environments, parent/family activities and community outreach programmes to prevent and treat overweight and obesity on a population-wide basis.



# A new movement in adolescent health



Giving adolescent girls confidence and guidance to pursue a healthy lifestyle, and sparking interest from schools across the world, the **New Moves** programme could be a solution to the growing obesity problem

**OBESITY IS AN** increasing global health problem. Worldwide, approximately 1.6 billion people over 15 years of age are overweight and greater than 400 million are classified as obese. The World Health Organization (WHO) predicts by 2015 these numbers will have risen to over 2.3 billion and 700 million respectively.

In the U.S., 16.9 per cent of two to 19 year olds are obese, according to the U.S. Centre for Disease Control and Prevention's 2007/2008 data. Obesity is known to contribute to cardiovascular disease (CVD), which is the world's leading killer at 17 million deaths per year; CVD encompasses coronary heart disease, stroke and diabetes. Clearly the danger is, with more children and adolescents becoming overweight and obese, the premature mortality rates from diseases like Type-2 diabetes and CVD will only increase.

Adolescent girls today are presented with a conflict of aspirations and lifestyle; an unrealistic body shape and concept of beauty combined with an environment that promotes an intake of energy-dense foods and little physical activity. There is a danger that the pressures put on teenage girls will lead to unhealthy weight control behaviours, including going on short-term diets, skipping meals, smoking cigarettes, and taking diet pills. Considering the root of these unhealthy actions is body dissatisfaction, low self-worth and low self-confidence, resorting to such behaviours

is often counter-productive and detrimental to health. However, Dr Neumark-Sztainer and her colleagues at the University of Minnesota could have a solution to this complex problem: a school programme that facilitates adolescent girls to pursue a healthy lifestyle and boost their self-esteem and body satisfaction.

## **NEW MOVES IN THE SCHOOL ROOM**

After over a decade of extensive research with students, teachers and parents, the New Moves programme is based on giving adolescent girls positive messages about being active, making healthy food choices, avoiding dieting and feeling good. Neumark-Sztainer describes the basis for developing the programme: "Students said physical education class was a source of stress and that they wanted different options available as well as a supportive environment where they felt less self-conscious while being active and talking about weight".

The programme is built on three core components: a physical education class including lessons on social support and healthy eating, lunch get-togethers and individual sessions.

'Be Fit' is the physical activity portion of New Moves and is entirely reliant on the 'girls only' premise of the whole New Moves programme. It seeks to create an environment where all girls of different shapes, sizes and skill levels are comfortable engaging in exercise and are moderately to vigorously active for half of the

classroom time. Activities extend from lifelong pursuits, such as walking or strength training, to a wider variety of fun exercises taught by guest instructors to highlight what activities are available in the girls' community and promote daily physical exercise beyond the school gate.

The classroom lessons are divided into two sub-sections dealing with social support and

**Girls who participated in the New Moves intervention reported more support for healthful eating and physical activity from family, friends and teachers**

nutrition. 'Be Fabulous' sessions use class discussion to enable students to consider body image issues, self-esteem and the pressures of peer groups and influence of media. The 'Be Fuelled' component promotes a non-dieting approach to eating. The sessions focus on balance and nutrition; emphasis is on the importance of eating well consistently, not dieting for short-term weight loss and avoiding unhealthy weight control behaviours.



Lunch get-togethers, called 'Lunch Bunches' are weekly events to which the girls are invited after class. Taking place at lunchtime, a healthy meal is provided along with the opportunity to receive social support and discuss topics related to the programme in an informal environment.

The final core component of the programme is one-to-one sessions; each student has five to seven individual sessions with a personal coach, for 20 to 25 minutes, over the course of the programme. The sessions help girls make healthy lifestyle choices by working with girls to identify and overcome their particular barriers to maintaining healthful dietary behaviours and being physically active.

### SUCCESS SO FAR

Over the year of the study, girls in the intervention schools showed positive results compared with the girls in the comparison schools. The students reported increased body satisfaction and self-worth as well as healthier behaviours, like less sedentary activity and skipping fewer meals for weight control. In fact, preliminary results showed a 13.7 per cent reduction of girls in the intervention schools using unhealthy methods for weight control. Furthermore, girls who participated in the New Moves intervention reported more support for healthful eating and physical activity from family, friends and teachers.

The response of the students, their families and teachers gives a strong indication of success. Neumark-Sztainer is encouraged by the staff response to the curriculum: "Many of the teachers also enjoyed teaching different activities like yoga or dance" she enthuses. One teacher said: "it reinvigorated my teaching".

Families were involved in the programme to a small degree; cards were sent home with advice and suggestions for how parents could approach the issue of living healthily with their daughter and a parent/daughter spa day was arranged to reinforce the New Moves messages. Of those parents who completed feedback forms, 100 per cent said they would recommend it to others. The central basis of New Moves is to promote confidence and self-esteem as a way of maintaining a healthy lifestyle through an individual's own actions. It is therefore telling that parents felt their daughters were healthier and more active as a result of the class.

### MOVING INTO NEW GROUND

Of the schools that took part in the New Moves programme, almost all have maintained the class in their timetable, some are teaching several sections of the course each year because of its popularity, and each school has modified New Moves to suit the interests of their students. In the clearest indictment of success, Neumark-Sztainer states: "Other school districts in the area have begun New Moves classes. Furthermore, educators from other areas in the United States, as well as Europe and Australia, have expressed interest in starting New Moves classes for their students". Adolescent obesity has been shown to correlate with socioeconomic inequality; therefore, a crucial point of Neumark-Sztainer's course is that all the materials needed to conduct a New Moves class are free to download from the internet at [www.newmovesonline.com](http://www.newmovesonline.com). The availability of effective and popular programmes such as New Moves in state education can only be of benefit to those students most in need of help in maintaining a healthy lifestyle.

## INTELLIGENCE

### NEW MOVES

#### OBESITY PREVENTION AMONG ADOLESCENT GIRLS

#### OVERVIEW

New Moves is an all-girls physical education class with a supportive and non-competitive environment. It includes fun activities like dance or yoga, as well as classroom lessons on healthy eating and topics of social support.

A group-randomised study found New Moves led to positive changes in weight related attitudes and behaviours.

#### COLLABORATORS

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#### FUNDING

National Institute of Diabetes and Digestive and Kidney Diseases (NIDDK) Grant R01 DK063107

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**DIANNE NEUMARK-SZTAINER**, PhD, MPH, RD, is the Principal Investigator on a number of research studies focusing on nutrition, physical activity, and the prevention of weight-related problems among adolescents. She has published over 250 articles in scientific journals and a book for parents of adolescents, called 'I'm, Like, So Fat! Helping your teen make healthy choices about eating and exercise in a weight obsessed world' (Guilford Press 2005).

