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JAMA. 2010;303(18):1857-1858 (doi:10.1001/jama.2010.592)

http://jama.ama-assn.org/cgi/content/full/303/18/1857

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Bring Back Home Economics Education

Alice H. Lichtenstein, DSc David S. Ludwig, MD, PhD

OME ECONOMICS, OTHERWISE KNOWN AS DOMEStic education, was a fixture in secondary schools through the 1960s, at least for girls. The underlying concept was that future homemakers should be educated in the care and feeding of their families. This idea now seems quaint, but in the midst of a pediatric obesity epidemic and concerns about the poor diet quality of adolescents in the United States, instruction in basic food preparation and meal planning skills needs to be part of any long-term solution.

About 35% of adolescents are overweight or obese, a prevalence that approaches 50% in minority populations. Excessive weight among youth affects virtually every organ system and, according to a recent study, increases the risk of premature death. In addition, obesity adversely affects self-esteem, academic accomplishment, and future earning potential of children.

Programs meant to address obesity in youth have achieved limited success. Some localities have begun to screen students with body mass index (BMI) "report cards," formed innovative relationships with farmers to supplement the school lunch with local produce, and enacted moratoriums on locating new fast food establishments in their neighborhoods. But powerful forces undermine these efforts, such as the ubiquitous advertising of foods and beverages high in calories and low in nutrient content.

Michelle Obama's "Let's Move" campaign—with its emphasis on improving the quality of food and beverage in the schools and the community—is a welcome and historic step. However, better choices in schools will ultimately have limited effects if children do not have the ability to make better choices in the outside-school world, where they spend the majority of their time when young and which they inhabit when older. If children are raised to feel uncomfortable in the kitchen, they will be at a disadvantage for life.

Two recent reports underscore the urgency of this situation. One story focusing on impoverished areas of the South Bronx identified a novel phenomenon in the United States: the coexistence of food insecurity and obesity in the same families and sometimes in the same individual. This "obesity-

hunger paradox" arises not only from lack of nutritious, affordable alternatives to fast food, but also from lack of knowledge about how to prepare nutritious food at home with inexpensive basic ingredients. At the other extreme, highend kitchen appliances now feature "smart" options for cookies, chicken nuggets, and omelets, allowing those with minimal cooking skills to prepare dishes or entire meals with the push of a button.⁵

Although the optimal diet for obesity and chronic disease prevention remains the subject of investigation, broad consensus exists regarding the benefits of home-prepared meals. Research suggests that frequent consumption of restaurant food, take-out food, and prepared snacks lowers dietary quality and promotes weight gain, ^{6,7} and that food preparation by adolescents and young adults may have the opposite effect by displacing poor choices made outside the home. The increase in consumption of meals and snacks prepared away from home, now exceeding one-third of total calories among children and adolescents, ⁹ appears related to the obesity epidemic.

Even more than before, parents and caregivers today cannot be expected or relied on to teach children how to prepare healthy meals. Many parents never learned to cook and instead rely on restaurants, take-out food, frozen meals, and packaged food as basic fare. Many children seldom experience what a true home-cooked meal tastes like, much less see what goes into preparing it. Work schedules and child extracurricular programs frequently preclude involving children in food shopping and preparation. The family dinner has become the exception rather than the rule.

To improve education about food, it is not necessary to bring back the classic home economics coursework, replete with gender-specific stereotypes. Rather, girls and boys should be taught the basic principles they will need to feed themselves and their families within the current food environment: a version of hunting and gathering for the 21st century. Through a combination of pragmatic instruction, field trips, and demonstrations, this curriculum would aim to transform meal preparation from an intimidating chore into a manageable and rewarding pur-

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(Reprinted) JAMA, May 12, 2010—Vol 303, No. 18 **1857**

suit. As children transition into young adulthood, they should be provided with knowledge to harness modern conveniences (eg, prewashed salad greens) and avoid pit-falls in the marketplace (eg, prepared foods with a high ratio of calories to nutrients) to prepare meals that are quick, nutritious, and tasty. It is important to dispel the myths—aggressively promoted by some in the food industry—that cooking takes too much time or skill and that nutritious food cannot also be delicious.

A comprehensive curriculum to teach students about the scientific and practical aspects of food might include basic cooking techniques; caloric requirements; sources of food, from farm to table; budget principles; food safety; nutrient information, where to find it and how to use it; and effects of food on well-being and risk for chronic disease. This curriculum would provide adolescents, especially at the high school level, with the skills they need to become confident in selecting, handling, and preparing food. To minimize competition with other curricular activities, many of these topics could be integrated into existing science, math, economics, physical activity, and social studies coursework. Some additional time during the school day would be required for hands-on cooking classes and field trips. However, with improvements in dietary quality that may result from the new curriculum, mental performance may increase, tending to compensate for any modest reductions in time available for other classes.

Education in food preparation would produce meaningful synergy with environmental changes in schools, especially improvement in food quality at breakfast and lunch. School cafeterias could be renovated to allow for preparation of cooked meals from raw ingredients, rather than just the reheating of frozen foods by microwave or deep frying, as has become the norm. Instead of using candy as an aid to teach counting in math class, more positive messages about health and nutrition could be creatively incorporated into coursework for students of all ages.

An informed generation of children may also influence the eating habits of US families, just as tobacco education causes some students to discourage their parents from smoking. Ultimately, as this generation of school-aged children and adolescents reaches adulthood, they may serve as positive role models for their children and, through their long-term purchasing habits, ensure healthful food choices are readily available in homes, supermarkets, and restaurants throughout the country.

Presently, many US schools provide information and guidance about tobacco, alcohol, drugs, sexually transmitted disease, and pregnancy; they should do the same about one of the most fundamental of human activities: eating. A reno-

vated home economics curriculum could equip young adults with the skills essential to lead long healthy lives and reverse the trends of obesity and diet-related diseases. This instruction will also help youth reestablish a healthy relationship with food, protecting them from the constant onslaught of weight-loss diets and body-building fads.

Obesity presently costs society almost \$150 billion annually in increased health care expenditures. ¹⁰ The personal and economic toll of this epidemic will only increase as this generation of adolescents develops weight-related complications such as type 2 diabetes earlier in life than ever before. From this perspective, providing a mandatory food preparation curriculum to students throughout the country may be among the best investments society could make.

Financial Disclosures: Dr Lichtenstein reported receiving grants from the National Institutes of Health for cardiovascular disease—related research. Dr Ludwig reported receiving royalties from a book about childhood obesity and grants from foundations and the National Institutes of Health for obesity-related research, mentoring, and patient care.

Funding/Support: Dr Lichtenstein is supported in part by grants from the National Heart, Lung, and Blood Institute; National Institute of Diabetes and Digestive and Kidney Diseases; and the Centers for Disease Control and Prevention. Dr Ludwig is supported in part by career award K24DK082730 from the National Institute of Diabetes and Digestive and Kidney Diseases.

Role of Sponsors: Funding sources had no role in the preparation, review, or approval of the manuscript.

Disclaimer: The content of this commentary is solely the responsibility of the authors and does not necessarily represent the official views of the National Heart, Lung, and Blood Institute; the National Institute of Diabetes and Digestive and Kidney Diseases; or the National Institutes of Health.

Additional Contributions: Simone French, PhD, University of Minnesota, and Nancy Fliesler, Children's Hospital, Boston, provided thoughtful suggestions about the manuscript. Neither received compensation for their contributions.

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