From the Editor

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Although the problem of unhealthy overweight has much to do with how we live as individuals, it seems profoundly determined by how we live as a society. The fact that nearly two thirds of adults in the United States are overweight and nearly one third are obese is pretty much common knowledge in the general medical community. It's a crisis situation, one could argue, and particularly for women. According to a recent study by the US Centers for Disease Control and Prevention, women in the United States increased their caloric intake by 22% (and men by 7 %) in the 30 years between 1971 and 2000.[1] The incidence of obese women in the United States stands now at about 33% of the population; it has practically doubled within a single decade.[2] At the end of 2003, the American College of Obstetricians and Gynecologists issued a press release stating that female obstetrician/gynecologists cite obesity as the leading health problem confronting women today. What can the Ob/Gyn and primary care physician do about this? One can certainly bone up on the latest evidence-based analyses of diets or studies of the effects of nutrition and physical activity on health and disease. Medscape is offering more and more in the way of news, articles, and CME in this area. Just type in "diet" into our much improved search engine, for example, or "exercise." One would then be in a good position to counsel patients to "eat well and exercise," and with some sophistication suggest what kind of foods they ought to be eating and why and what forms of exercise might be particularly appropriate. Well, fine -- especially if your patient is relatively high up on the socioeconomic scale; but these recommendations might cause utter frustration in a woman who is on the lower end. And chances are you may have more obese women who are poorer, given data from Health and Human Services that indicate women of lower socioeconomic status are approximately 50% more likely to be obese than those with higher socioeconomic status. (As an aside, men are about equally likely to be obese whether they are in a low or high socioeconomic group).[3]

A review published in the January 2004 issue of the *American Journal of Clinical Nutrition* provides an important analysis of poverty and obesity and supports the notion that addressing obesity more effectively requires confronting it as a societal and public health problem.[4] Dr. Adam Drewnowski, Director of the Center for Public Health Nutrition in the University of Washington School of Public Health and Community Medicine, and Dr. SE Specter, United States Department of Agriculture Human Nutrition Research Center, Davis, California, analyze the rising trend of obesity in the United States in terms of dietary energy density and energy costs. They review a substantial body of literature showing that low income and low education levels are associated with obesity in the United States; this is especially the case for women. Food insecurity (limited or uncertain availability of nutritionally acceptable or safe foods) has also been associated with obesity. In particular, the authors point out that food insecurity without hunger seems to be associated with overweight in women. But the main thesis of the article by Drewnowski and Specter is that the association between obesity and poverty may be linked to the low cost of energy-dense foods (ie, foods high in added sugars and fat) and their

overconsumption. In their words, "the selection of energy-dense foods by food-insecure or low-income consumers may represent a deliberate strategy to save money...persons attempting to limit food costs will first select less expensive but more energy-dense foods to maintain dietary energy." In addition, "energy-dense foods tend to be well-liked, even perceived as a reward -- a factor that would reinforce their initial selection and repeated consumption."

In an illuminating section of the article, the authors compare the energy density (MJ/kg) of some foods in relation to their energy cost (cents/10 MJ). For example, the energy cost of potato chips is about 20 cents/MJ (1200 kcal/$) as compared with about 95 cents/MJ (250 kcal/$) for carrots. As the authors write:

The inverse relation between energy density and energy cost suggests that "obesity-promoting" foods are simply those that offer the most dietary energy at the lowest cost. Given the differential in energy costs between energy-dense and energy-dilute foods, the advice to replace fats and sweets with fresh vegetables and fruits may have unintended economic consequences for the consumer.

Or, as Drewnowksi was reported as saying in a press release:

It's a question of money...On a per calorie basis, diets composed of whole grains, fish, and fresh vegetables and fruits are far more expensive than refined grains, added sugars and added fats. It's not a question of being sensible or silly when it comes to food choices, it's about being limited to those foods that you can afford...People are not poor by choice and they become obese primarily because they are poor.

So one has to think about what it means to recommend a healthy diet to a patient. As Drewnowski and Specter point out, "any discussion of dietary energy density in relation to diet costs has been missing from the mainstream literature on the determinants of obesity in the United States."

Medical expenditures in 2003 attributed to obesity reached $75 billion.[5] The official poverty rate increased in 2002 to 12.1%; at least 34.6 million people live below the poverty threshold. The number of families with a female head of the household (with no husband present) in poverty increased to at least 3.6 million in 2002.[6] No doubt higher-wage earners are also drawn to foods with high palatability and low-energy cost so that they can spend a lower percentage of their income on food. The escalating rate of obesity has been traditionally discussed in terms of biology, physiology, and behavior (eg, see recent comments by Dr. J. Willis Hurst) the discussion needs to include the role of economics and social policy. Solutions to the obesity epidemic will in part require that healthy food be accessible and affordable, and this will require our engagement not only as health professionals but citizens.

If you have comments or questions about the site, please contact me at womenshealtheditor@webmd.net.

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