

Why Are We Subsidizing Childhood Obesity?

Philip J. Landrigan, M.D., M.Sc.

Lisa M. Satlin, M.D.

Paolo Boffetta, M.D., M.P.H.

Obesity is epidemic in America's children. The potential health consequences for the next generation are grave, and the impact on the nation's health care costs — an estimated \$14 billion per year — is substantial and growing. We need urgent realignment of the health and farm policies that have contributed to this crisis.

Since 1980, obesity rates in children have tripled. Today, 13 million children are obese, including 14 percent of all 6- to 11-year-olds, and 17 percent of adolescents. Over 70 percent of these children will be obese adults, with increased risks of diabetes, heart disease, and certain cancers. Today's children may be the first U.S. generation in a century to have a shorter lifespan than their parents.

Insufficient physical activity is a major driver of childhood obesity. Structural features of the modern environment — too few sidewalks, unsafe playgrounds, and insufficient physical education programs — contribute, as do reliance on cars and a sedentary lifestyle. Poverty is a major risk factor. Chemical obesogens — synthetic chemicals that alter the body's metabolism — are coming under scrutiny.

But an especially powerful driver is the abundance of cheap, unwholesome food sweetened by the synthetic sugar substitute high-fructose corn syrup (HFCS). Consumption of HFCS has increased tenfold since 1974. The obesity epidemic in America's children precisely tracks this trend.

HFCS was invented in the 1960s. Production increased dramatically in the 1970s, after the U.S. Department of Agriculture (USDA) ended controls on corn, wheat, and soy production and replaced them with a policy that encouraged — and paid — farmers to grow as much of these commodity crops as possible. Today, these subsidies total \$19 billion per year. They have led to enormous increases in production of cheap corn starch. No subsidies are paid to fruit or vegetable farmers despite the clear health benefits of eating fresh fruits and vegetables.

High-fructose corn syrup now represents 40 percent of the non-calorie-free sweeteners added to U.S. foods. It is virtually the only sweetener used in soft drinks. Because of subsidies, the cost of soft drinks containing HFCS has decreased by 24 percent since 1985, while the price of fruits and vegetables has gone up by 39 percent. By 2006, the average American child drank 132 calories of HFCS per day from sweetened beverages, and the 8-ounce soft drink of a generation ago was replaced by the even cheaper 20-ounce super-size drink.

Due to these and other factors, it is estimated that overall caloric intake in the U.S. has increased an alarming 600 calories per person per day since 1970. Burning these extra calories would require, on average, an additional hour of physical activity per day.

As with tobacco, commodity subsidies need to be reexamined. It is incongruous and wasteful for health agencies to spend millions of dollars countering obesity while the USDA spends billions in farm subsidies that indirectly promote it. Fruit and vegetable farmers need more support: calories from vegetables are 100 times more expensive than those from HFCS, making it financially challenging for many consumers to make healthy food choices.

Curbing the obesity epidemic requires a multifaceted approach: education, increased physical activity, healthy school food, promotion of unprocessed foods — and a change in agricultural policy. Coordinated national leadership is essential.



MOUNT SINAI
SCHOOL OF
MEDICINE

Philip J. Landrigan, M.D., M.Sc., is Dean for Global Health at Mount Sinai School of Medicine in New York City. He is a principal investigator for the National Children's Study.

Lisa M. Satlin, M.D., is Chair of the Department of Pediatrics, and Paolo Boffetta, M.D., M.P.H., is Deputy Director of The Tisch Cancer Institute.

One in a series of commentaries by prominent Mount Sinai physicians and scientists.