



# Is There a Role for Government in Reducing the Prevalence of Overweight and Obesity?

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Whether counted in lives or dollars, obesity is a sizable problem. However, this observation alone does not justify government intervention. Without evidence that the market solution leaves room for improvement, neither economic logic nor federal regulatory guidelines would support government action.

Generally, markets do a good job coordinating economic activity so that resources are put to their most valued use. However, it is possible that some markets could fail to accurately reflect consumer or societal preferences. In its guidance to regulatory agencies on how to evaluate the costs and benefits of government intervention, the US Office of Management and Budget (OMB) states that the first requirement for such intervention is a demonstration that relevant markets are failing to allocate resources correctly (OMB, 1996). This requirement has been reaffirmed by the current administration (OMB, 2003).

Without evidence of market failure, there is the danger that any government policy, including food policy to curtail overweight and obesity, could cause more harm than good. In this paper, we examine how the evidence stacks up for the obesity problem. We investigate whether failure in food markets may help explain the growth of overweight and obesity in this country.<sup>1</sup>

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*1. Although failures in markets for exercise or medical interventions could also contribute to the obesity problem, they are not the topic of this paper.*

## Is There Evidence that Obesity and Overweight are the Result of Market Failure?

We considered three possible market-failure scenarios: (a) producers are not responsive to consumer demand and do not supply the types of food desired by consumers; (b) consumers do not have enough information to make informed choices and inadvertently demand (and consume) diets high in calories; or (c) consumers make poor diet choices because they do not bear all the health costs of their choices. Any of these failures could potentially result in the production of a mix of foods that does not best satisfy consumer or societal preferences. We examine the evidence for each scenario below.

### Do Markets Supply the Types of Foods Desired by Consumers?

It is difficult to imagine that a business strategy that disregards consumer preferences could succeed for long. This is particularly true in the highly competitive and innovative modern food industry. Technological advances in processing, storage, transportation, and communication have increased the ability of food manufacturers to both gauge and satisfy variations in consumer food preferences. Consumers in the United States had about 40,000 food products to choose from in the typical supermarket in 2000 (Harris, Kaufman, Martinez, & Price, 2002).

The wide variety of food products on grocery store shelves reflects the willingness and ability of the industry to adapt to consumer preferences—even short-lived or faddish ones. For example, low-

fat and low-carb diets have both influenced the mix of foods. In 1996, at the height of the low-fat movement, manufacturers introduced 3,434 new food products that were labeled “low fat” or “no fat.” Between 1987 and the end of September 2004, manufacturers introduced 35,272 such products (Figure 1). In 2003, 700 “low-carb” or “no-carb” products hit the market; through the end of September of 2004, 2,753 such products followed.

Competition to attract and keep customers extends to the fast-food and restaurant industries. Large portions, boasting good value for the buck, and high-fat (tasty) foods are one way to draw customers. “Healthy” foods, such as salads topped with broiled chicken breast, bunless burgers, low-carb pizza, low-fat yogurt parfaits, and heart-healthy menu options, are another.

In fact, the urban landscape is dotted with specialty grocery stores that attest to the willingness of markets to supply whatever consumers want, even when those consumers have low incomes. Asian, Caribbean, Indian, and South American stores all dish up a variety of processed foods, fresh fruits, and vegetables for their customers, many of whom are low-income recent immigrants. Perhaps one of the most extreme examples of how far retailers will go to tailor their services to the needs of low-income consumers is the emergence of “WIC-only” stores, which cater exclusively to participants in the Special Supplemental Nutrition Program for Women, Infants, and Children.

Overall, the evidence does not seem to support the conclusion that industry is unwilling or unable to supply the types of foods that consumers desire. We conclude that it is very unlikely that unhealthy food consumption patterns stem from this sort of market failure.

### ***Do Consumers Have Enough Information to Make Informed Food Choices?***

If consumers do not have enough information to make informed choices, then the foods they purchase and consume may not actually match their preferences. They may inadvertently choose poor diets simply because they do not know which diets are healthy and which are not. They may also be uninformed about what constitutes a healthy weight and about the negative health consequences of overweight and obesity. In either case,

the market outcome may not reflect true consumer preferences.

The sheer volume of media coverage devoted to diet and weight makes it difficult to believe that many Americans are not conscious of the relationship between a healthful diet and obesity. Even a consumer who managed to avoid the popular media could not escape the onslaught of information. Physicians, government education programs, nutrition labels, and product health claims all provide consumers with information on what constitutes a healthy diet and weight. Mirrors, bathroom scales, and belt notches provide constant updates, as do unsolicited comments about our changing weight status from friends or relatives.

Survey results indicate that this barrage of information has informed Americans. Results from the US Department of Agriculture’s (USDA) Diet and Health Knowledge Survey indicate that a majority of American consumers have basic nutrition knowledge. Survey results indicate that most people can discriminate among foods on the basis of fat, fiber, and cholesterol. Most are aware of health problems related to nutrients (Variyam & Blaylock, 1998).

Though a lack of information does not seem to characterize most food markets, there is, nevertheless, evidence of some information blackout zones. One such zone involves public perceptions of appropriate weight. Kuchler and Variyam (2002) found that 41% of individuals whom health professionals would classify as overweight (but not obese) did not perceive themselves to be overweight. Among individuals whom professionals would classify as obese, 13% said that their weight is about right or even too low. Furthermore, the highest frequency of these “doubters” is found in the ranks of those who scored lowest in diet and health knowledge.

One of the most widely discussed information blackout zones is for food sold at restaurants and fast-food establishments. Although the 1994 National Labeling and Education Act requires that manufacturers include a nutrition information panel on the label of almost all packaged foods, it does not require any similar disclosure for foods purchased at restaurants—food away from home (FAFH).<sup>2</sup> This information requirement gap may be increasingly important as a source of information failure. Not only are Americans consuming

large amounts of FAFH, but the nutritional content of FAFH tends to be less healthy than foods prepared at home (Guthrie, Lin, & Frazão, 2002).

The negative characteristics of FAFH do not necessarily indicate that information fails to reach consumers. As long as consumers are just a little cynical, markets will work to disclose information on even negative product characteristics. For example, a sandwich restaurant advertising “low-fat, low-carb” menu options may cast into doubt the fat and carbohydrate content of the sandwiches in a competing restaurant that does not advertise such claims. This competitive disclosure drives firms to make explicit claims for all positive aspects of their products and allows consumers to make appropriate inferences about foods without claims.

A possible limitation to the success of competitive disclosure in FAFH markets is the fact that negative attributes are widely shared by producers in the market. Restaurants offer foods high in fat and calories because these foods tend to taste good. No producer has an incentive to disclose information about fat and calories because no competitive advantage can be gained by doing so; it is difficult for any producer to reduce fat and calories without compromising taste, given the current state of food technology. As a result, there may be little advertised nutritional information against which to contrast and compare any particular food option.

Another possible limitation to nutrition disclosure in markets for FAFH is the complexity of nutrition information (Jessup, 2001). Though savvy consumers may be able to infer that a dessert that does not have a “heart healthy” logo next to it on the menu has more cholesterol or saturated fat than one with the logo, they cannot infer any information about sugar or calorie content. Inference is just not adequate for accurately disclosing all of the nutrients that may be of interest to consumers.

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2. *Food away from home is the term used to describe all foods prepared outside the home, including foods prepared and eaten at restaurants and fast-food establishments, take-out meals prepared by restaurants and fast-food establishments, ready-to-eat meals from supermarkets, and home-delivered meals.*

The evidence is mixed on whether these limitations to nutrition disclosure in FAFH are hindering the flow of information and the ability of consumers to make informed decisions about FAFH choices. On the one hand, most consumers suspect that food served at fast-food restaurants is not the healthiest. A 2003 Gallup Poll survey found that two thirds of consumers thought that most food sold at fast-food restaurants was not good for them (Saad, 2003). On the other hand, consumers may not be able to gauge precisely the nutritional content of FAFH. A 1996 survey conducted by New York University and the Center for Science in the Public Interest found that trained dietitians underestimated the calorie content of five restaurant meals by an average of 37% and the fat content by 49% (Backstrand, Wootan, Young, & Hurley, 1997).

### ***Are Individual Food-Consumption Choices Socially Optimal?***

Individual consumers may not consider all the costs and benefits of their food-consumption choices. The existence of health insurance, both private and public, may distort the correspondence between the personal and social costs of maintaining an unhealthy weight. Insurance may reduce consumers’ incentives to take all cost-justified health precautions (including choosing a healthy diet), because it reduces the medical costs paid directly by consumers. Economic efficiency will be compromised if individuals react to insurance by replacing healthy diets (preventive care) with tasty but unhealthy ones (and much more expensive ameliorative care for their chronic illnesses).

The fact that a large part of the health-care bill from overweight and obesity is eventually footed by taxpayers—not private insurance providers—may further misalign social and private costs. Finkelstein, Fiebelkorn, and Wang (2004) found that Medicare and Medicaid pay for at least half of obesity-attributable medical expenses. This means that what would otherwise be a matter of personal choice (and responsibility) has become a matter of concern for all taxpayers. Though simply transferring the bill for health care to the public sector does not guarantee inefficiencies and declining diet quality, it does guarantee controversy when the bill is large. In addition, if diet quality does decline and taxpayers foot an ever-growing bill for overweight

and obesity, their financial interest in the health behavior of others is also bound to grow.

Tapping the public purse for health-care expenses does not by itself demonstrate an efficiency problem. If it did, there would be no end to the number of risky behaviors that we might want to discourage and no end to the public sector's control over individual choices. Many activities, including skiing, unprotected sex, and home repairs involving power tools, raise health-care expenses. Eating raw oysters is clearly a more risky proposition than eating many other foods. An efficiency loss from having the public sector pay health-care expenses arises if individuals choose unwisely because of the health-care subsidy. In this case, it may be the public sector and not the market that has failed.

### **Evidence of Market Failure is not Evidence of Cost-Effective Policy**

Identification of potential market failure opens the door to government intervention. It also suggests which type of policy intervention may be best targeted to ameliorating the problem. Information policy, such as nutrition education programs and labeling, would seem to be best targeted to information problems, whereas medical plans that internalize the costs of overweight and obesity would seem to be best targeted to correcting spillover cost problems.

However, even the best-targeted policy tools may not pass a cost-benefit test. Moreover, even if they do, more fundamental causes of weight-gain trends—causes that have nothing to do with market failure—may remain. For example, neither public education nor revamped health insurance will fundamentally alter the shift in technology-induced relative prices that may underlie the growth in overweight and obesity. Technological change has created a largely sedentary workforce (Philipson & Posner, 2003), meaning that workers have to exercise more outside work or reduce their calorie intake to maintain weight. In addition, improvements in food-storage technology (e.g., frozen microwavable meals) have reduced the time cost of preparing meals (Cutler, Glaeser, & Shapiro, 2003), encouraging consumers to eat. Medical technology in the treatment of obesity-related illnesses has also improved, turning some hopeless situations into chronic illnesses and reducing the

health costs of obesity. If medical advances continue to reduce the health consequences of obesity, the incentive to maintain a healthy weight will continue to diminish, maybe one day becoming a function only of vanity.

### **For More Information**

- Backstrand, J., Wootan, M.G., Young, L.R., & Hurley, J. (1997). *Fat chance*. Washington, DC: Center for Science in the Public Interest.
- Cutler, D., Glaeser, E.L., & Shapiro, J.M. (2003). Why have Americans become more obese? *Journal of Economic Perspectives*, 17(3), 93-118.
- Finkelstein, E.A., Fiebelkorn, I.C., & Wang, G. (2004). State-level estimates of annual medical expenditures attributable to obesity. *Obesity Research*, 12(January), 18-24.
- Guthrie, J.F., Lin, B.-H., & Frazão, E. (2002). Role of food prepared away from home in the American diet, 1977-78 versus 1994-96: Changes and consequences. *Journal of Nutrition Education and Behavior*, 34, 11-16.
- Harris, J.M., Kaufman, P.R., Martinez, S.W., & Price, C. (2002). *The U.S. food marketing system, 2002* (agricultural economic report no. 811). Washington, DC: US Department of Agriculture Economic Research Service.
- Jessup, A. (2001). Nutrition labeling. In *Economics of Food Labeling* (agricultural economic report no. 793). Washington, DC: US Department of Agriculture Economic Research Service.
- Kuchler, F., & Variyam, J.N. (2002). Misperceptions in self-assessed weight status vary along demographic lines. *FoodReview*, 25(Winter), 27-33.
- Office of Management and Budget, The Executive Office of the President. (1996). *Economic analysis of federal regulations under Executive Order 12866*. Available on the World Wide Web: <http://www.whitehouse.gov/omb/inforeg/riaguide.html>.
- Office of Management and Budget, The Executive Office of the President. (2003). *Circular A-4*. Available on the World Wide Web: <http://www.whitehouse.gov/omb/circulars/a004/a-4.pdf>.
- Philipson, T.J., & Posner, R.A. (2003). The long-run growth in obesity as a function of techno-

logical change. *Perspectives in Biology and Medicine*, 46(3 Summer supplement), S87-S107.

Saad, L. (2003). *Public balks at obesity lawsuits*.

Princeton, NJ: The Gallup Organization. Available on the World Wide Web: <http://www.gallup.com/content/login.aspx?ci=8869>.

Variyam, J.N., & Blaylock, J. (1998). Unlocking the mystery between nutrition knowledge and

diet quality. *FoodReview*, 21(May-August), 21-28.

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