Assignment 2: Implications of Government Food Policies to Address Obesity

Background

Overweight and obesity, with their related illnesses, have become one of the major public health risks facing the industrialized world. Overweight and obesity have been found to be significantly associated with a number of health risk factors, including “diabetes, high blood pressure, high cholesterol, asthma, arthritis, and poor health status” (Mokdad et al. 2003). Prevalence of both overweight and obesity have increased substantially over the last few decades; by 2002, nearly two thirds of US residents were overweight and nearly one third obese (Figure 1). The current epidemic of overweight appears to be the combined effect of increased consumption of highly caloric and fat-laden foods, and decreased physical activity. In addition, where portion sizes have changed in the compared intervals of 1989-1991 and 1994-1996, the major change has been an increase in portion size (Smiciklas-Wright et al. 2003).
Adults are not alone in suffering from overweight; in fact, they seem to be providing an example for the next generation of obese children and adolescents; the percent of overweight youngsters has more than tripled in four decades (Figure 2). If unchecked, this epidemic in obesity will cause major social problems for the industrialized world, in terms of lowered quality of life and increased medical costs of treating the many ailments associated with excessive weight. Even by 1990, estimated medical costs for caring for health problems related to diet ran into billions of dollars per year (Bidlack 1996).
If the data provided by the CDCs are any indication, the US public is not making very good choices when it comes to diet and activity. With obesity quickly becoming one of our major public health risks, the government may have a role to play in generating and administering policies designed to curtail this epidemic.

Assumption of Consumer Rational Choice

Currently the FDA requires nutrition information to be displayed on food items. The intention is to provide consumers data with which they can make informed choices about their nutritional intake. But research has shown that consumers range widely in their ability to either understand these labels, or to use the printed information in making dietary choices (Barone et al. 1996; Ford et al. 1996; Andrews et al. 1998; Li et al. 2000). While in general, consumers were able to discern between misleading health claims about “heart healthiness” and printed nutrition information, at least part of the time, consumers may ignore the posted nutrition information and instead rely on the health claims printed on the packaging (Mitra et al. 1999). A compounding
factor is the ambiguous nature and sometimes direct conflict of government guidelines for nutritional health (Gifford 2002).

A common assumption is that consumers are fully informed about the outcomes of their purchases, but for dietary choices this may be a false assumption. Current dietary policies have changed little since the first USDA nutritional guidelines were published in 1916, even though the amount of nutritional knowledge has increased steadily since that time (Gifford 2002). If the government’s officially published information is at odds with the current state of knowledge, and if consumers obtain most of their information from government sources, it follows that consumers are not likely to be well informed about nutrition. One of the major, albeit not unbiased, sources of information for consumers is advertising. The power of advertising should not be underestimated as a force driving choice for products, and additionally as a source of potential misinformation. Advertisements for foods do not require the same nutrition labeling as the products themselves, so health claims cannot be substantiated (Andrews et al. 1998). Studies have shown that among young children, advertising directly influences product choice (Borzekowski and Robinson 2001), which is especially disquieting given the rise in childhood obesity over the last few decades.

Under the rational choice model, if we assume consumers are well informed about good nutritional choices, it follows that consumers will make the best decision after weighing all possible outcomes. Consumers do attempt to maximize the utility function of food (to obtain the greatest amount of the highest quality food at the lowest price). Various different goods may follow the rational choice model, but food is probably too complicated a product to be simplified
in the same way. Unlike many other choices (e.g., where to live, what mode of transportation to take, what style of shoes to buy), food has a direct and immediate influence on pleasure centers in the brain. Evolutionarily, humans have become adapted to deal with times of plenty as well as times of scarcity; this has instinctualized a strong desire for foods high in sugars, fats, and salt. Therefore, the most balanced nutritional choice is frequently discarded in favor of the choice that brings the most short-term enjoyment. To complicate matters, fast food companies are able to market foods that are very cheap to produce and buy, convenient to obtain and consume, but also appeal to our basic desire for foods that are energetically dense, even though most fast food is nutritionally relatively depauperate.

With apologies to Jonathan Swift, where food is concerned, the human appears to be less *animal rationale* and more *animal rationis capax*. If consumers are not making rational choices about diet and activity, given the potentially high social costs associated with these poor choices, is there a role for greater government involvement in the issue?

**A Case for Government Involvement in Food Policy**

Because of the high social and financial costs associated with obesity and overweight, government agencies are becoming increasingly interested in ways to address this crisis. Government intervention in public health has many precedents throughout the distant and recent past. In the mid-1850s, John Snow was able to persuade the London Board of Guardians to remove the Broad Street water pump handle as the first decisive step to slow the cholera epidemic (Snow 1855). Governments have made efforts to fight outbreaks of other infectious
diseases, such as influenza and hepatitis, and to control the spread of HIV/AIDS. Governments have also intervened in health risk factors that are not specifically related to infectious disease, but related to types of behavior that may pose threats to the health of the general public. Many jurisdictions have enacted bans on smoking in public places such as restaurants and other workplaces. Regulation has also been employed due to the high costs associated with the results of certain behaviors that do not necessarily endanger the health of the general public, but of specific individuals. Legislation often blurs the distinction between public and private dominion; we have laws against suicide, driving automobiles without using safety belts, and riding a motorcycle without wearing a helmet.

The rationale behind requiring motorcycle helmets is transparent. Beyond a doubt, motorcycle riding is an inherently dangerous activity, and numerous studies have shown that helmets are protective against injury and death in motorcycle accidents. But helmet laws imply that the government believes individuals lack the common sense to protect themselves. Why should the government get involved in what may be seen as an individual risk? One person riding a motorcycle without a helmet poses little threat to others, but the medical costs associated with severe brain trauma are borne by the general public through increased insurance rates or Medicare/Medicaid payments. The government acts in order to shield the public from bearing these costs.

A similar rationale can be used to frame public policy related to food regulation. Recent trends in weight gain indicate the general public is either unable or unwilling to voluntarily decrease food consumption or to increase levels of physical activity. Individual weight gain poses no
general public health risk; that is, one person gaining excessive weight does not directly threaten the health of anyone else. However, the overall burden on the health care system caused by obesity will certainly lead to increased costs borne by the public, much in the same way the public bears the costs of preventable injuries due to car or motorcycle accidents. If government becomes involved in helmet and seat belt laws, is this a precedent for a role for government involvement in food policies to protect the public from its own poor choices of nutrition and physical activity?

While the analogy between food and other public health issues may hold in some respects, food and motorcycle helmets are different in substantial ways. Whereas motorcycle riding is an inherently risky activity, food in and of itself is a good thing which only becomes a bad thing under certain circumstances. As a public health issue, food is especially problematic, because although when consumed excessively or in unhealthy relative proportions, it is the source of health problems; yet, it is also a necessity for life, an art form, and indeed, one of the greatest pleasures in life. In contrast, most other public health issues result from detrimental forces, such as pathogens, accidents, or inherently risky behaviors (e.g., smoking, drinking excessive amounts of alcohol). It could be argued that government involvement in protecting public health from inherently detrimental forces is warranted, but overly stringent regulation of a basic necessity such as food may be interpreted as the government becoming too involved in the personal lives of individuals.

However, government involvement in food policy arenas has occurred frequently and has typically focused on several themes. The most important function appears to be protection of the
safety of the food supply. Outbreaks of *E. coli* O157, salmonella, bovine spongiform encephalopathy, and listeria have highlighted the insecurity of the US meat production industry, and food safety agencies have begun to address these issues.

Market failures often stimulate governments to intervene in control of the food supply. The US government regularly becomes involved in market controls of agriculture through subsidies or purchase and redistribution of surplus food commodities. Some of this surplus is distributed through foreign aid organizations to victims of war or natural disaster in other regions of the world. A large portion of food surplus is also distributed nationally through food banks and soup kitchens. In this regard, the government’s role is in modulating food supplies to maintain access to a variety of foods, to stabilize the price of food items, as well as to provide food to the needy.

Governments have addressed nutritional inequality through programs designed to improve access to adequate food for the disadvantaged. As a response to low nutrition among the poor, the public funds the school lunch and school milk programs, which provide food to schoolchildren for free or at substantially discounted rates. Similarly, the food stamp program increases access to foods for poor and disadvantaged individuals and families. Another avenue for government involvement is in public education and information, exemplified by the Food Pyramid Guidelines and required “Nutrition Facts” labels. Researchers have also proposed national food policies for a number of other reasons, such as price stabilization to support low-income households (Houthakker 1976).
More recently, governments have become concerned with the issue of “food security.” Food policy councils, typically formed by a coalition of public planning agency staff, academics, and community activists, have been developed in a number of cities in North America to address issues of food security, equity, safety, and quality (Campbell 2004). National and international policies relating to food security have also become a high priority for the UN FAO. A search of the FAO’s web site resulted in 1959 articles pertaining to “food security” and 282 articles pertaining to “food policy” (but only 7 articles pertaining to “obesity”).

**Government policies to address the obesity epidemic**

The government has been involved in food systems in many ways, but is only recently beginning to address the epidemic of obesity. The problem will need to be handled delicately; telling people what they can and cannot eat, and regulating what foods can and cannot be sold is clearly a form of totalitarianism and would be as impossible to enforce as it would be to legislate. Federal policies should generally not override the choice of consumers unless the object of the choice is inherently bad or dangerous, which is not the case where food is concerned. Nevertheless, if current trends continue, ignoring the problem will definitely not make it go away.

Possible solutions to the obesity crisis take two basic forms: (1) increase measures to get consumers to eat a healthier diet, and (2) decrease the economic burden on the public. The Food Pyramid Guideline is intended to get consumers to eat a healthier diet. The American Dietetic Association continues to update its guidelines for dietetic practitioners, mainly in promotion of education about and encouragement of healthy behaviors among its clientele (Johnson and
Nicklas 1999; Cummings et al. 2002). However, dietary habits are probably more strongly influenced by social and physical environments than by knowledge of the nutritional content of foods. If public education were an efficacious method for dealing with the obesity epidemic, we should already be seeing results, but rather, the problem seems to be getting worse.

There is some indication of minor food choice switching (Huot et al. 2004), but due to the overall increase in calories consumed, diets have not improved substantially (Bush and Williams 1999). Bush and Williams (1999) argue that policies designed to encourage switching from less healthy to more healthy foods, either across or within categories will require large expenditures in public education and will result in relatively small return. Rather, they suggest policies to encourage food producers to create or reformulate and market healthier foods through effective subsidies.

Another suggestion is a so-called “fat tax” that would in essence increase the costs of unhealthy foods, which would act as a deterrent to consumption. An economic analysis (Kinsey and Bowland 1999) showed that in order to achieve a 1% decrease in fat consumption, the price of fat would need to be increased by 15%. Food producers would be unlikely to willingly or quietly concede to such regulations. Lowering the price of fruit, meat, and dairy products would result in consumption more close to the Food Pyramid ideal, but the overall effect on diet would be negligible, as a decrease in the amount of money spent on fruit, meat, and dairy would free up money to be spent on other foods, including those high in fat and sugar.
In the Nordic countries, positive nutritional habit changes have been achieved in part due to public policies, but of course these countries have a longer history of public involvement in private affairs than the US, and residents of Norway, Sweden, and Finland are more amenable to public education programs (Kjaernes 2003). Originally concerned with adequate nutrition, in the 1970s, Nordic nutritional policies became focused on reduction of fat intake.

A growing body of research increases our understanding of the etiology of this epidemic, but very little research literature exists on methods for population-level treatment or effective policies to combat obesity. Wadden et al. (2002) propose additional research on number of policy measures specifically to target obesity: (1) regulate food advertising aimed at children, (2) prohibit fast foods and soft drinks from schools, (3) subsidize the sale of healthy foods, (4) tax unhealthy foods, and (5) provide resources for physical activity.

Given the current environment, in which calories consumption is on the rise and physical activity is decreasing, lowering the prevalence and incidence of obesity will require efforts of both the public and private sectors. Ultimately the only way to deal with the obesity problem will be to alter individual behaviors. But exactly how to foster this type of behavior modification most efficiently and effectively is unknown.
References Cited:


