

# Getting from Fat to Fit: The Role of Policy in the Obesity Disaster



INVITED ESSAY

*Suzanne Havala Hobbs*, DrPH, MS, RD, FADA

Clinical Assistant Professor, Director, Doctoral Program in Health Leadership  
Research Fellow, Center for Health Promotion and Disease Prevention  
Department of Health Policy and Management, Gillings School of Global Public Health,  
University of North Carolina at Chapel Hill



## ABSTRACT

*Increasing health and economic costs of overweight and obesity underscore the urgency of finding effective means of addressing the problem. There is broad support within the public health community for approaches that are holistic in nature, taking into account a host of factors that make up the food environment and ultimately influence individual behaviours. Policies with the power to support substantial and even radical changes in the food environment will require a high degree of political will, a systems approach and global co-operation. Small steps are unlikely to produce adequate results. Change of this magnitude will require newly developed and effectively deployed leadership capacities, particularly within our senior public health workforce.*

THE WORLD IS fat and getting fatter.

At one time, this phenomenon was viewed as a burden of affluence unique to those fortunate enough to live in societies where they could work at desk jobs and eat processed foods. Today, however, much of the world

is afflicted with the health problems associated with overweight and obesity. The World Health Organization (WHO) estimates that globally 1.6 billion adults over the age of 15 are overweight and at least 400 million adults are obese (WHO 2004).

Definitions for overweight and obesity are similar among medical and scientific communities around the world. They convey a consensus that individuals who are overweight (have body mass index, or BMI,  $\geq 25$  but  $< 30$ ) or obese (BMI  $\geq 30$ ) incur greater health risks. In the United States, the government estimates that two thirds of adults – about 134 million people – are overweight or obese (National Center for Health Statistics 2007c). In Canada, estimates are slightly lower but reflect an increasing trend toward overweight and obesity during the past 20 years (Statistics Canada 2005).

The trend is similar in children. US data show the prevalence of overweight or obesity in children and adolescents has risen during the past two decades, affecting 17% of those aged six to 19 years (National Center for Health Statistics 2007b). Similar trends in children and adolescents are of concern around the world (WHO 2004).

What is happening to our bodies? The explanations are both simple and complex. In the most basic terms, we are taking in more calories than we are expending. A world-wide proliferation of processed foods high in sugar, fat, sodium and calories and low in dietary fibre, coupled with less frequent and less vigorous physical activity, is causing us to gain weight.

Examined from an ecological perspective, however, the reasons are far more complex and insidious. While choices about what to eat and whether and how to be active are ultimately at the discretion of individuals, a confluence of environmental factors conspires against our abilities to make choices that best support health.

Changes in technology and social and familial structures, for example, have for many created lifestyles that include sedentary jobs, leave little time for recreation and include fewer meals at home. Inequities in socioeco-

omic status and unequal access to supportive healthcare services further limit choices. These inequities may, for example, result in reduced access to safe parks and recreational facilities, markets for affordable fresh fruits and vegetables and health professionals who can provide individualized diet counselling.

Moreover, government policies regarding such issues as agricultural subsidies and dietary guidance, as well as industry influence through food advertising and the production of highly processed, low-nutrition foods, comprise factors with which individuals cannot alone cope. Behind these issues are myriad influential interests, many of which stand to lose should substantial and effective steps be taken toward remedies by local, state or provincial or national governments. These make the obesity problem extremely difficult to address.

### **The Fierce Urgency of Now**

The evidence of increasing health and economic costs associated with overweight and obesity underscores the urgency of finding effective means of addressing the problem. The global contribution of obesity to morbidity and mortality from high blood pressure, coronary artery disease, type 2 diabetes, osteoarthritis, some forms of cancer and other chronic, degenerative diseases and conditions is high and growing (Flegal et al. 2005; Kaufman 2002; WHO 2002). In the United States, the Centers for Disease Control and Prevention (CDC) reported in 2006 that one in 523 individuals under the age of 20 years had diabetes (CDC 2008). It is particularly troubling to consider that as the health effects of obesity affect individuals at younger ages, their prospects for living long and healthy lives are greatly diminished.

There are economic costs to obesity as well. Finkelstein et al. (2003) estimated that the cost in 2002 in the United States

of medical spending due to overweight and obesity was equal to US\$92.6 billion, or 9.1% of annual health expenditures. Costs include direct expenses such as doctor visits, hospital and long-term care costs, medications and outpatient services as well as the indirect costs of lost productivity due to illness, disability and premature death (Wolf and Colditz 1998; Wolf et al. 2002).

Few would argue that obesity is a serious public health problem deserving of immediate attention. In fact, the problem of obesity was identified and targeted for action as long ago as 1952 when the American Heart Association cited obesity as a risk factor for coronary artery disease treatable by diet and exercise, as did the 1977 US Senate report *Dietary Goals for the United States* (Nestle and Jacobson 2000). In 1980, prevention and treatment of obesity was cited as an “objective of the nation” (US Department of Health and Human Services 1980). Since then, however, the problem has gotten worse.

What does it take to create the conditions in which people in North America and around the world can achieve weights that support health? There is growing recognition within the scientific and public health communities that any approach to a solution must be holistic in nature, taking into account a host of factors that make up the food environment and ultimately influence individual behaviours (US Department of Health and Human Services 2000; WHO 2002). Efforts, like many in the past, that focus solely or primarily on health education have been inadequate. Policies with the power to support substantial and even radical changes in the food environment will require a high degree of political will – an exceedingly difficult goal to achieve. But we have to try.

### **A Holistic View of Obesity and Health**

On the individual level, obesity is a disease

with profound implications for long-term health and well-being. From the population perspective, the global obesity epidemic is a public health disaster that threatens the physical and mental health of people and the economic health of nations.

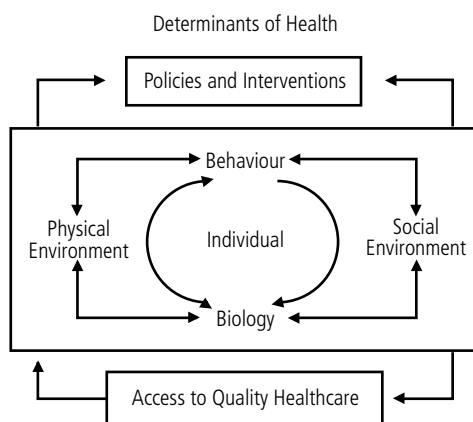
In addition to this, though, the phenomenon of obesity signals a nutritional and public health crisis much larger than a problem of excess calories. The conditions that result in obesity affect the balance of other nutritional components of the diet, as well, with adverse effects on health that increase the risk of a constellation of diseases and conditions. Obesity is a proxy for the widespread breakdown in our system of healthcare. The fix will require a holistic, systems approach and global co-operation.

A substantial evidence base supports the idea that determinants of health include a broad range of interrelated environmental factors that together help or hinder efforts to maintain a health-supporting lifestyle (WHO 2008a). These factors include physical conditions such as proximity to safe parks and recreational areas, sidewalks, bike paths and distance to place of employment; social conditions such as cultural traditions, relationships with family and friends, level of education and income; and individual biological or genetic factors and behaviours such as diet and exercise habits. The impact of these factors on individual health is further amplified by the effects of a wide range of health and economic policies and interventions, as well as access to health services. A graphic representation of these relationships is shown in Figure 1.

Economically developed nations including the United States and Canada benefit from a level of affluence that, it seems, should make it easier to create conditions that support health than it is in less-affluent nations. However, a comprehensive public health strategy that addresses the food envi-

ronment necessarily must confront tensions between the interests of private individuals and corporations and those of society as a whole. In his accompanying paper, my colleague, Neil Seeman, discusses the role of post-partisanship in brokering such co-operation. There is no doubt that solutions to the obesity crisis will require bipartisan policy making co-operation at all levels of government. Given our decades-long lack of success in reversing the obesity trend, however, the question of such efforts will be, Are the results good enough?

**Figure 1. Determinants of health**



Source: US Department of Health and Human Services (2000).

### A Critical Role for Policy

Without rules, it would be difficult to ensure the conditions in which people can be healthy. Rules are needed to reconcile the natural tensions that exist between the interests of individuals, including corporations, and the public at large. As a business owner, for example, I may prefer not to reveal the high level of artery-clogging saturated fat or trans fat in the cookies I market. However, government regulations – the rules – may require me to list on the package label the nutritional content of my product so that consumers, having access to

the information, may make an informed choice about whether or not to buy my cookies.

If we agree that complex environmental relationships have a bearing on the ability of individuals to make choices that support health, then it follows that rules, or policies, and subsequent interventions should be created with an eye toward creating the optimal physical and social conditions for health. An underlying assumption is that society values health and feels an ethical commitment to contributing to the conditions in which the most people may benefit. This is expressed in various ways, but it includes a view that, to the extent possible, all people should have access to at least the minimum resources and conditions necessary to support health and well-being.

Individuals of lower socioeconomic means are particularly vulnerable to environmental conditions that may impede efforts to maintain a health-supporting lifestyle. They often have fewer choices than do those who are more affluent. For example, the urban poor tend to have decreased access to safe places in which to play, ride a bike, walk to work, swim or play tennis. Their jobs may allow for less flexibility and freedom to get physical activity during the day. They may have limited access to supermarkets that sell fresh produce and limited means to pay for higher-quality foods. Government policies that help remedy these barriers to good health are particularly critical to these individuals.

A value judgment – an ethical choice – must be made by society in determining the appropriate role of governments in enacting policies that promote health. For the past eight years, Bush Administration policies relating to diet, obesity and health in the United States have in fact emphasized a diminished role for government and an increased emphasis on the personal responsibility of individuals for diet and exercise behaviours to combat obesity (Leonard 2004,

March 10; Salant 2004, January 16). The direction of US policy in that regard is at odds with the WHO 2004 publication *Global Strategy on Diet, Physical Activity and Health*, which cites the role of government policies – both those that facilitate health-supporting lifestyles and those that detract from them – as a vital aspect of efforts to fight obesity.

The competing interests of private and public stakeholders profoundly complicate policy development and implementation where the issue of obesity is concerned. Government efforts to date to address obesity in the United States have focused primarily on underfunded educational campaigns, such as the MyPyramid website (<http://www.mypyramid.gov/>) and corresponding dietary guidance print materials (Center for Nutrition Policy and Promotion 2005). Activities such as these, which educate but do not provide incentives or environmental support for change, tend to incur little economic or political cost and, therefore, enjoy bipartisan political support (Stone 2002). Unfortunately, they also appear to have little or no impact on collective lifestyle behaviours and the prevalence of obesity.

A food environment without physical and social supports for weight control and health affects not only the less-affluent but affluent populations as well. There is every reason to believe, for example, that children in well-to-do households are just as susceptible to the suggestions of food marketers as are children of less-affluent households. There is ample reason to believe that food advertisements, through a variety of media and entertainment outlets, influence children to eat junk foods, considering the vast amounts of money industry devotes to the pursuit of these consumers (Gantz et al. 2007; Institute of Medicine 2005; Powell et al. 2007). Effective efforts to influence these and other lifestyle behaviours will necessarily involve policy actions, and

change will require political will. Integral to discussions about policy options to reduce obesity will be candour about our ethics and transparency in the value judgments we make.

The policy discussion and recommendations discussed below are shaped by the following views:

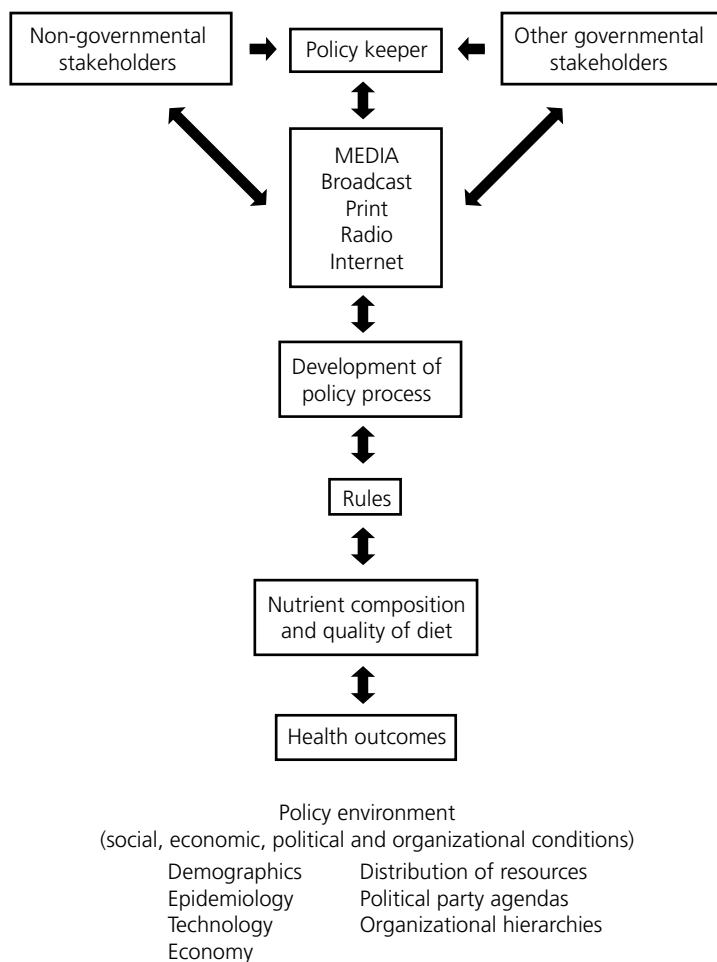
1. There is an ethical imperative to support and, to the extent possible, to enable the conditions for people to be healthy.
2. Government must play a key role in enacting policies that create a food environment that supports weight control and health.
3. The interests of governments, industry and civil society can be balanced to achieve mutual goals.
4. Policies to address obesity must be part of a comprehensive public health strategy that views the problem holistically.

### **Policy Barriers to the Prevention and Treatment of Obesity**

Discussion of the policy aspects of the obesity epidemic can be approached using a framework that integrates an ecological view of the public policy making process and general systems theory (Hobbs et al. 2004; Milio 1990, 1997). This approach identifies key interest groups within and outside government with a stake in the related policies. Interest groups influence policy through actions (or inaction) that affect the shape, pace or direction of policies. These groups include a policy keeper – an agency or another strategic management unit whose primary role it is to move the policy through the process of development and to respond to inputs from other interested parties.

For example, in the United States, the National School Lunch Program (NSLP) is administered by the US Department of Agriculture (USDA). When rules concerning administration of the NSLP are modified, the

**Figure 2. Food and nutrition policy making process**



Sources: Adapted from Milio (1997) and Hobbs et al. (2004).

USDA functions as the policy keeper, or strategic management unit of the federal government. Other interested parties inside and outside government attempt to exert influence on the USDA to move the policy in the direction of their respective policy goals (Hobbs et al. 2004).

The actions of interest groups are influenced by factors in the policy environment, including the social, political, economic and organizational conditions in which policies evolve. These factors include such dimensions as demographics, technology, national and world economies, the distribution of

resources, public sentiment and political party agendas, the relative strength of various organizations and so on. The influence of interest groups on policy is further affected by passage through the filter of mass media (Figure 2)

With this framework in mind, it is easy to understand how complexities inherent in the policy making process and tensions among stakeholders play out to influence the rules, regulations and laws that affect the living conditions that hinder or enhance health. It is beyond the scope of this commentary to debate the extent to which conditions that support health may coexist in free-market economies without government intervention. However, others have concluded that governments must play a central role in working with interested parties to create the conditions that support and encourage healthful eating habits and patterns of physical activity (Nestle and Jacobson 2000; WHO 2002).

Policy barriers to addressing the obesity crisis centre on the extent to which our current system coordinates the actions of multiple policy keepers, balances private and public interests, enables transparency and participation of all stakeholders in the policy making process and, once policies are approved, funds the related programs and interventions that support health. The examples given here are not exhaustive but are illustrative of issues that confound efforts of individuals and populations to live health-supporting lifestyles.

## Lack of Coordination

The United States, like many countries, has no unified national health policy. Rather, the responsibility for developing, implementing, monitoring and evaluating health policies is shared among numerous policy keepers. The nation's health objectives, spelled out in *Healthy People 2010: The Cornerstone for Prevention* (US Department of Health

*... the best interests of the public's health must be paramount and the role of scientific evidence and consensus in the policy process protected against any undermining influence from stakeholders for whom financial goals are the top priority.*

and Human Services 2000), list objectives to be implemented by 13 federal agencies, including the Agency for Healthcare Research and Quality, CDC, Food and Drug Administration, Health Resources and Services Administration, National Institutes of Health, Office of Disease Prevention and Health Promotion and others. No single agency has the lead role.

Areas of jurisdiction are often illogical or unclear. For example, the US Departments of Agriculture and Health and Human Services (2005) jointly produce the *Dietary Guidelines for Americans 2005*, but the regulation of related food-labelling policies (as well as dietary supplements) is managed separately by the US Food and Drug Administration.

In 2007, when animal feed from China containing melamine was fed to hogs that were eaten by people, no government mechanism was in place for coordinating the interagency

efforts needed to manage the incident. In the absence of a clear lead policy keeper, departments and agencies took unilateral, uncoordinated action or did nothing at all. The crisis was eventually managed by a makeshift crisis action team initiated by the US Department of Homeland Security using informal relationships among several interested agencies, including DHS, the State Department, CDC, FDA, USDA and others (Jeffrey W. Runge, MD, assistant secretary for health affairs [acting] and chief medical officer, US Department of Homeland Security, personal communication, May 16, 2007).

Examples of coordinated, national nutrition policies exist or have been implemented for periods of time in parts of Europe, including Scandinavia, the United Kingdom and central and eastern Europe (WHO, Regional Office for Europe, 1998). These efforts deserve further study and may serve as models or resources for best practices and lessons learned that might inform efforts in North America and other parts of the world.

## Conflicts of Interest

All stakeholders, or interested parties, should be given a voice as health policies are discussed and debated. However, the best interests of the public's health must be paramount and the role of scientific evidence and consensus in the policy process protected against any undermining influence from stakeholders for whom financial goals are the top priority.

The US government's emphasis on individual responsibility for lifestyle choices is one example in which policy makers have adopted and promoted an industry-formulated position to the detriment of efforts to address the obesity problem. A 2004 letter to then US Health and Human Services secretary Tommy Thompson from the Transatlantic Consumer Dialogue (TACD), an international coalition of consumer organizations, criticized

US government efforts to influence the draft WHO Global Strategy by pushing individual responsibility as the primary approach to addressing obesity. The letter stated:

We are pleased that your department has highlighted the seriousness of the obesity issue now confronting consumers world-wide. However, we are concerned about the steps your department has taken to modify the WHO's strategy and suppress the recommendations made by a team of international experts who wrote the report. Last month, for example, your department called on the WHO Executive Board to approve a resolution that emphasized individual responsibility as the primary way to address obesity. The research discussed at the TACD conference indicates that obesity should be addressed by governments, and industry, not just individuals. Given the current food environment where high-calorie foods are marketed heavily to children, governments must do their part to control advertising and facilitate healthy eating, as recommended in the WHO Global Strategy.

In the interests of public health, we urge you to resist interference from commercial concerns and allow WHO to submit the draft Global Strategy, without amendments, to the World Health Assembly for approval in May. (TACD 2004)

Another example is the US policy for creation of national dietary recommendations. USDA is charged with protecting and supporting the interests of American agribusiness. At the same time, the agency is appointed jointly with the Department of Health and Human Services to oversee the development of the nation's Dietary Guidelines for Americans every five years.

These dietary guidelines are the foundation for federal food and nutrition programs, including the NSLP and other child nutrition programs.

Science increasingly points to the prudence of diets lower in processed foods, high-fat and sugary foods and animal products. However, those findings are at odds with the interests of powerful food industry sectors that stand to lose should government policies shift away from support for those products. There have been well-documented instances in which the sugar, meat, dairy and processed food industries have successfully weakened or obscured clear dietary recommendations that would encourage decreased production and consumption of these foods (Nestle 2007). WHO has faced similar pressures in drafting its own dietary recommendations (Burros 2005).

A related issue concerns the extent to which government agencies are populated with individuals who move back and forth between positions in industry and government, and the extent to which the work of government agencies is increasingly being outsourced to private corporations. This blending of government and industry personnel and functions undermines the independent control and oversight of health policies by government agencies and ultimately diminishes their authority.

### **Lack of Accountability**

Efforts to solve the obesity epidemic will require a level of transparency in policy decisions and actions that is often lacking in government policy keepers. This includes full disclosure of the business interests of those in leadership roles in the policy making process, including individuals serving on expert panels or committees charged with drafting policy documents and public policy recommendations. Transparency in governance helps to increase the likelihood that resulting policies will serve the public interest, and it helps parties with a



stake in the policy develop trust in the competence of government policy keepers.

The US Dietary Guidelines for Americans provide a case example of the importance of transparency in food and nutrition policy making. The dietary guidelines are meant to convey to the lay public information about best dietary choices for health, including weight control. As previously noted, they have

*Government decisions about how to spend money, and whether or not to collect taxes, may influence consumers' eating and exercise habits by affecting many aspects of the food environment.*

been criticized for decades for being influenced by food industry sectors that stand to lose should Americans follow contemporary advice to eat less saturated fat, added sugar and sodium.

During preparation in 1998 of the fifth edition of the dietary guidelines (published in 2000), a federal lawsuit was filed by the Washington, D.C.-based advocacy group Physicians Committee for Responsible Medicine (PCRM), after investigation by the group found that six of the 11 members of the Dietary Guidelines Expert Committee had ties with the food industry through such activities as research grants, consulting and board service (PCRM 2000). Industry affiliations included the National Dairy Council, the American Egg Board, the American Meat Institute, the National Livestock and Beef Board and other organizations with an interest in the wording of specific guidelines. The court took no action to restrict the service of these committee members but agreed that the concerns brought

to the attention of the court merited consideration by USDA and the Department of Health and Human Services in the future. (In the interest of transparency, I note that I serve on the PCRM board of advisors.)

In some cases, it is considerably more difficult or impossible to gain access to information about how government food policies or decisions are made. Over the past eight years in the United States, government agency press office functions have been centralized, cutting journalists off from direct communication with researchers and other personnel in several key agencies with functions related to food, nutrition and health policies. A journalist who wishes to speak to an expert at CDC, for example, must first seek access to that individual through the Department of Health and Human Services press office. At best, this step delays access of the journalist to a source, and it may prevent the source from contributing to the news story if a deadline is tight. Once the journalist connects with the source, a second agency representative often monitors the discussion between journalist and source by remaining on the phone line, for example. This practice has the potential to influence the extent to which a source feels free to share information.

The mass media function as a filter and facilitator of open communication among interested parties in the policy process. Government policies that limit or otherwise interfere with freedom of information risk diminishing the efficacy of policies meant to serve the public interest.

### **Fiscal Policies**

Government decisions about how to spend money, and whether or not to collect taxes, may influence consumers' eating and exercise habits by affecting many aspects of the food environment. Money allocated to child nutrition programs, educational campaigns and

curricula, for example, may increase familiarity with and consumption of health-supporting foods. Funding of sidewalks, bike paths, walking trails and safe community parks and recreational facilities affect the extent to which people can realistically incorporate physical activity into their daily lives. Allocating more funding to supporting these components of the physical environment is one important way government could help to overcome a barrier to weight control, particularly in low-income neighbourhoods.

Fiscal policies also affect the cost of food. In that way, they can provide a direct economic incentive – or disincentive – to eat a diet that supports health and an ideal weight. For example, attention to policies that support local, sustainable agricultural methods can aid in the economic development of communities and supply the public with health-supporting foods at a reasonable cost. Instead, however, industrialized food production is the norm in most developed countries.

Current US fiscal policies for agricultural subsidies enable a system of relatively inexpensive food that encourages the consumption of a high intake of low-nutrition foods and foods high in calories, added sugar, saturated fat and cholesterol. Through a variety of mechanisms, the US government supports the production of meat, milk and sugar, leading to artificially low prices for cheeseburgers, soft drinks and other junk foods. In this way, the government encourages the continued intake of the nutrients that most people in North America consume in excess and that are associated with health problems, including obesity, coronary artery disease, diabetes and some forms of cancer.

Similar price supports are not extended to the production of fruits, vegetables and other health-supporting foods in short supply in the diets of North Americans. This can make the “dollar menu” at a fast-food outlet seem

like a bargain and the fresh fruit and salad at the supermarket seem like a splurge. The net result is that consumers are encouraged through price comparisons to choose fewer of the foods that might assist them in losing weight or maintaining a healthy weight.

Any of a number of combinations of fiscal policies could be used to leverage efforts to help people control their weight. Taxes on soft drinks and other junk foods have at times been proposed as a means, like taxes on cigarettes, to discourage consumption. Money collected from junk food taxes could be allocated to fund policies that support health. Once again, however, a value judgment would have to be made if the interests of the public are to win out over private interests that stand to lose financially should human health be made a priority and fiscal policies adjusted accordingly.

### **Opportunities to Enhance Policy**

Going forward, policy efforts to control obesity, promote health and prevent disease in North America may benefit from two shifts in perspective. The first requires a global outlook and collaboration, and the second involves risk management.

The advantage – and necessity – of joining efforts globally has been expressed by others (Trans Atlantic Consumer Dialogue 2006, WHO 2004). In some cases, individual countries may not have the capacity to achieve results on their own. Even for developed countries, the global nature of the food trade can make international policy issues relevant domestically. At the very least, international co-operation between governments, professional associations, private industry, non-governmental organizations and others could produce benefits from collaboration on research and exchange of ideas and information about best practices. International co-operation could also be extended to include,

for example, standardization of core dietary recommendations, food labelling and policies related to food marketing, particularly advertising that targets children.

Another issue that is relevant to the potential for success of global collaboration is the approach taken in assessing and respond-

*... policy inaction in the United States stands in contrast to the actions taken in parts of Europe where restrictions have been placed on advertising that targets children.*

ing to risks relating to food, nutrition and health. Policies developed in response to real or perceived risks may best be approached with “prudent precaution.”

Risk is tolerated to various degrees by different nations, and regulatory action – or inaction – follows accordingly. Most European Union countries, for example, subscribe to the “precautionary principle,” the idea that policy decisions that relate to the public’s health should err on the side of caution when the risks cannot adequately be assessed. Consumers in these countries tend to have a strong voice and substantial clout in shaping these policies. The relative lack of acceptance of genetically modified foods throughout the European Union as compared with their acceptance in the United States is an example. The application of the precautionary principle can vary along a continuum of risk tolerance, but a preference for caution, in general, stands in contrast to policy practices in the United States, where private industry has greater power than consumers do in shaping government regulatory responses to risk.

An example includes discussions in the

United States about the regulation of junk food advertising that targets children. The Institute of Medicine issued a report in 2006 that recommended that national guidelines be developed for advertising and marketing foods, beverages and sedentary entertainment to children. The committee said that there is not enough evidence to support an outright ban but that the approach should be vigorous and resemble those used to control alcohol and tobacco. Industry has fought such regulation, in part by invoking constitutional rights to freedom of speech. Given the same evidence base, policy inaction in the United States stands in contrast to the actions taken in parts of Europe where restrictions have been placed on advertising that targets children.

Hahn and Sunstein (2005) have suggested that the precautionary principle may overlook unforeseen risks inherent in decisions about regulatory action or inaction. All policies, including those that invoke caution, impose risk. The authors cite the drug-approval process as an example. Government policies to prevent the introduction of new drugs that have not been completely tested may prevent individuals from benefitting from those drugs. Sunstein (2005) recommends an approach that combines precaution for only the most serious risks, careful examination of the costs and potential benefits of policy actions (and inaction) and subscription to an approach of “libertarian paternalism.” The latter makes allowances for individual choice while using economic incentives to influence those choices. Cheap vegetables and expensive soft drinks, for example, would help to move consumers’ food choices in a direction that supports health.

To the extent that governments around the world could come to an agreement about a general approach to managing risk in decisions that affect health, collaborative efforts to address the obesity crisis and improve the health of the public globally would be

enhanced. How do we define and operationalize a policy for “prudent precaution”?

### **Where Do We Go from Here?**

Issues pertaining to the obesity epidemic are complex, and solutions will necessarily require the co-operation of myriad stakeholders with varied and often conflicting interests. The fix will therefore also require a high level of leadership capacity within the public health workforce and other constituency groups affected. The pressing need for leadership training to solve some of the world’s most urgent health problems has been widely recognized (Canadian Health Leadership Network 2006; IOM 1988, 2003; WHO 2008b).

Numerous organizations have put substantial thought and effort into plans for change that address long-term solutions to problems of obesity and chronic disease. Among them, the WHO *Global Strategy on Diet, Physical Activity and Health* (2004), with its origins in the 1986 Ottawa Charter for Health Promotion (WHO 1986), is the most comprehensive plan. It and the TACD (2006) *Resolution on Nutrition, Obesity and Diet-related Disease* emphasize the need for global co-operation. A report by the Institute of Medicine (2005) limits its scope to the United States. Each of these plans details similar barriers and opportunities.

There is no shortage of smart policy prescriptions to help solve the world’s obesity problem. They include a range of ideas, including some cited in this paper, such as reorienting farm subsidy programs, restricting junk food advertising aimed at children, supporting greater access to fresh fruits and vegetables, providing funding for public parks and so on. However, for any of these policy changes to succeed, a major investment will need to be made in the development of leadership skills among public health advocates and authorities. More specifically, efforts to solve the obesity

epidemic and to improve the health of people around the world will require substantial abilities in and attention to strategic management and planning, fiscal leadership, government accountability and ethical leadership:

- **Strategic management and planning.** The creation of coordinated national and global nutrition and health policies will require greater capacities to bring about organizational change and to reconcile competing interests while protecting the public interest.
- **Fiscal leadership.** We need high-level understanding of the relationships between country-specific financial policies and health, as well as the ability to effectively communicate these ideas to policy makers and other constituency groups. Fiscal policies can influence the price of foods through taxation, subsidies or direct pricing in ways that encourage health-supporting eating habits. Attention is also needed in making the business case for investing in prevention measures and directing adequate funding toward policies and programs that support obesity prevention and health.
- **Government accountability.** Transparency in governance is the key, and all constituency groups must have free access to accurate and complete information that allows them to fully participate in policy making processes. That transparency is also needed for individuals so that they can make informed diet and health choices and be fully informed about the efficacy of government programs and policies to protect and support health.
- **Ethical leadership.** A commitment to social justice will be necessary to effectively manage and overcome tensions between private interests and the public good. Attention to creating a health-supporting food environment for all must be a goal of compassionate and ethical communities and governments.

To the extent that the obesity epidemic is a proxy for widespread breakdown in our system of healthcare in the United States and around the world, the seriousness of the problem cannot be overstated. Small steps are unlikely to produce adequate results. The challenge is in generating the political will and global co-operation to make much larger changes. Change of this magnitude will require newly developed and effectively deployed leadership capacities, particularly within our senior public health workforce.

## References

- Burros, M. 2005, January 13. "U.S. Diet Guide Puts Emphasis on Weight Loss." *The New York Times*. Retrieved June 12, 2008. <<http://www.nytimes.com/2005/01/13/health/13diet.html>>.
- Canadian Health Leadership Network. 2006. Meeting Notes from the Health Leadership in Canada, Blue-Sky Meeting, Ottawa, ON.
- Center for Nutrition Policy and Promotion, US Department of Agriculture. 2005. *MyPyramid.gov: Steps to a Healthier You*. Alexandria, VA: Author. Retrieved June 12, 2008. <<http://www.mypyramid.gov/>>.
- Centers for Disease Control and Prevention, Department of Health and Human Services. 2008. "Diabetes: Disabling Disease to Double by 2050." *At a Glance* 2008. Retrieved June 12, 2008. <<http://www.cdc.gov/nccdphp/publications/aag/ddt.htm>>.
- DeMattia, L. and S.L. Denney. 2008. "Childhood Obesity Prevention: Successful Community-Based Efforts." *Annals of the American Academy of Political and Social Science* 615(1): 83–99.
- Finkelstein, E.A., I.C. Fiebelkorn and G. Wang. 2003. "National Medical Spending Attributable to Overweight and Obesity: How Much, and Who's Paying?" *Health Affairs Web Exclusive* W3:219–26. Retrieved June 12, 2008. <<http://content.healthaffairs.org/cgi/content/full/hlthaff.w3.219v1/DC1>>.
- Flegal, K.M., B.I. Graubard, D.F. Williamson and M.H. Gail. 2005. "Excess Deaths Associated with Underweight, Overweight, and Obesity." *Journal of the American Medical Association* 293(15): 1861–67.
- Gantz, W., N. Schwartz, J. Angelini and V. Rideout. 2007. *Food for Thought: Television Food Advertising to Children in the United States*. Menlo Park, CA: The Henry J. Kaiser Family Foundation. Retrieved June 12, 2008. <<http://www.kff.org/entmedia/upload/7618.pdf>>.
- Hahn, R. and C.R. Sunstein. 2005. "The Precautionary Principle as a Basis for Decision Making." *The Economist's Voice* 2(2 Article 8): 1–9.
- Hobbs, S., T.C. Ricketts, J. Dodds and N. Milio. 2004. "Analysis of Interest Group Influence on Federal School Meals Regulations, 1992–1996." *Journal of Nutrition Education and Behavior* 36(2): 90–98.
- Institute of Medicine. 1988. *The Future of Public Health*. Washington, DC: National Academy Press.
- Institute of Medicine. 2003. *The Future of the Public's Health in the 21st Century*. Washington, DC: The National Academies Press.
- Institute of Medicine. 2005. *Preventing Childhood Obesity: Health in the Balance*. Washington, DC: The National Academies Press. Retrieved June 12, 2008. <<http://books.nap.edu/openbook.php?isbn=0309091969>>.
- Institute of Medicine. 2006. *Food Marketing to Children and Youth: Threat or Opportunity*. Washington, DC: The National Academies Press. Retrieved June 12, 2008. <[http://books.nap.edu/catalog.php?record\\_id=11514](http://books.nap.edu/catalog.php?record_id=11514)>.
- Kaufman, F.R. 2002. "Type 2 Diabetes Mellitus in Children and Youth: A New Epidemic." *Journal of Pediatric Endocrinology and Metabolism* 15 Suppl 2: 737–44.
- Leonard, M. 2004, March 10. "U.S. Launches a Fight Against Obesity." *The Boston Globe*. Retrieved June 12, 2008. <[http://www.boston.com/news/nation/articles/2004/03/10/us\\_launches\\_a\\_fight\\_against\\_obesity/](http://www.boston.com/news/nation/articles/2004/03/10/us_launches_a_fight_against_obesity/)>.
- Milio, N. 1990. *Nutrition Policy for Food-Rich Countries: A Strategic Analysis*. Baltimore, MD: The Johns Hopkins University Press.
- Milio, N. 1997. "Case Studies in Nutrition Policymaking: How Process Shapes Product." In B. Garza, ed., *Beyond Nutritional Recommendations: Implementing Science for Healthier Populations*. New York: Cornell University Press.
- National Center for Health Statistics, Centers for Disease Control and Prevention. 2007a. *Chartbook on Trends in the Health of Americans. Health, United States, 2007*. Hyattsville, MD: US Public Health Service.
- National Center for Health Statistics, Centers for Disease Control and Prevention. 2007b. *Prevalence of Overweight among Children and Adolescents: United States, 2003–2004*. Atlanta, GA: Author. Retrieved June 12, 2008. <[http://www.cdc.gov/nchs/products/pubs/pubd/hestats/overweight/overwght\\_child\\_03.htm](http://www.cdc.gov/nchs/products/pubs/pubd/hestats/overweight/overwght_child_03.htm)>.
- National Center for Health Statistics, Centers for Disease Control and Prevention. 2007c. *Prevalence of*

## Getting from Fat to Fit: The Role of Policy in the Obesity Disaster

- Overweight and Obesity among Adults: United States, 2003–2004*. Atlanta, GA: Author. Retrieved June 12, 2008. <[http://www.cdc.gov/nchs/products/pubs/pubd/hestats/overweight/overwght\\_adult\\_03.htm](http://www.cdc.gov/nchs/products/pubs/pubd/hestats/overweight/overwght_adult_03.htm)>.
- Nestle, M. 2007. *Food Politics: How the Food Industry Influences Nutrition and Health*. Berkeley, CA: University of California Press.
- Nestle, M. and M. Jacobson. 2000. "Halting the Obesity Epidemic: A Public Health Policy Approach." *Public Health Reports* 115: 12–24.
- Physicians Committee for Responsible Medicine. 2000. "Dietary Guidelines for Americans 2000. Summary of PCRM's Lawsuit Versus the U.S. Dept. of Agriculture and the U.S. Dept. of Health and Human Services." *News*. Washington, DC: Author. Retrieved June 12, 2008. <[http://www.pcrm.org/news/lawsuit\\_summary.html](http://www.pcrm.org/news/lawsuit_summary.html)>.
- Powell, L., G. Szczypka, F. Chaloupka and C. Braunschweig. 2007. "Nutritional Content of Television Food Advertisements Seen by Children and Adolescents in the United States." *Pediatrics* 120(3): 576–83.
- Salant, J. 2004, January 16. *U.S. Opposes U.N. Obesity Report*. Associated Press. Retrieved June 12, 2008. <<http://www.cbsnews.com/stories/2004/01/16/health/main593707.shtml>>.
- Statistics Canada. 2005. *Table 105-0407. Measured Adult Body Mass Index (BMI), by Age Group and Sex, Household Population Aged 18 and Over Excluding Pregnant Females, Canadian Community Health Survey (CCHS 3.1), Canada, Every 2 Years, CANSIM (database)*. Ottawa, ON: Statistics Canada. Retrieved June 12, 2008. <[http://cansim2.statcan.ca/cgi-win/cnsm-cgi.exe?Lang=E&CANSIMFile=CII\CII\\_1\\_E.htm&RootDir=CII/](http://cansim2.statcan.ca/cgi-win/cnsm-cgi.exe?Lang=E&CANSIMFile=CII\CII_1_E.htm&RootDir=CII/)>.
- Stice, E., H. Shaw and C.N. Marti. 2006. "A Meta-analytic Review of Obesity Prevention Programs for Children and Adolescents: The Skinny on Interventions that Work." *Psychological Bulletin* 132: 667–91.
- Stone, D. 2002. *Policy Paradox: The Art of Political Decision Making*, Revised Edition. New York: Norton.
- Sunstein, C. 2005. *Laws of Fear: Beyond the Precautionary Principle*. Cambridge, UK: Cambridge University Press.
- Trans Atlantic Consumer Dialogue/Dialogue Transatlantique des Consommateurs. 2004. *HHS Secretary Thompson Re Obesity and WHO, February 2004*. London, UK: Author. Retrieved June 12, 2008. <<http://www.tacd.org/cgi-bin/db.cgi?page=view&config=admin/docs.cfg&id=230>>.
- Transatlantique des Consommateurs. 2006. *Resolution on Nutrition and Diet-Related Disease* (Document No. Food-26-06). London, UK: Author. Retrieved June 12, 2008. <[http://www.tacd.org/db\\_files/files/files-408-filetag.doc](http://www.tacd.org/db_files/files/files-408-filetag.doc)>
- US Department of Agriculture and US Department of Health and Human Services. 2005. *Dietary Guidelines for Americans 2005*. Rockville, MD: Author. Retrieved June 12, 2008. <<http://www.health.gov/DietaryGuidelines/dga2005/document/default.htm>>.
- US Department of Health and Human Services. 1980. *Promoting Health/Preventing Disease: Objectives for the Nation*. Washington, DC: Government Printing Office.
- US Department of Health and Human Services, Office of Disease Prevention and Health Promotion. 2000. *Healthy People 2010: The Cornerstone for Prevention*. Rockville, MD: Author. Retrieved June 12, 2008. <<http://www.healthypeople.gov/Publications/>>.
- Wolf, A.M. and G.A. Colditz. 1998. "Current Estimates of the Economic Cost of Obesity in the United States." *Obesity Research* 6(2): 97–106.
- Wolf, A.M., J.E. Manson and G.A. Colditz. 2002. "The Economic Impact of Overweight, Obesity and Weight Loss." In R. Eckel, ed., *Obesity: Mechanisms and Clinical Management*. Philadelphia, PA: Lippincott, Williams and Wilkins.
- World Health Organization. 1986. *The Ottawa Charter for Health Promotion*. Geneva, Switzerland. Retrieved June 12, 2008. <<http://www.who.int/health-promotion/conferences/previous/ottawa/en/>>.
- World Health Organization. 2002. *The World Health Report 2002. Reducing Risks, Promoting Healthy Life*. Geneva, Switzerland: Author. Retrieved June 12, 2008. <<http://www.who.int/whr/2002/en/>>.
- World Health Organization. 2004. *Global Strategy on Diet, Physical Activity and Health*. Geneva, Switzerland: Author. Retrieved June 12, 2008. <<http://www.who.int/dietphysicalactivity/goals/en/index.html>>.
- World Health Organization. 2008a. *Health Impact Assessment. The Determinants of Health*. Geneva, Switzerland: Author. Retrieved June 12, 2008. <<http://www.who.int/hia/evidence/doh/en/index.html>>.
- World Health Organization. 2008b. *Health Leadership Service: Programme Overview*. Geneva, Switzerland: Author. Retrieved June 12, 2008. <[http://www.who.int/health\\_leadership/overview/en/](http://www.who.int/health_leadership/overview/en/)>.
- World Health Organization, Regional Office for Europe. 1998. *European Food and Nutrition Policies in Action*. Copenhagen, Denmark: Author.