

PILING ON THE LAWS, SHEDDING THE POUNDS? THE USE OF LEGAL TOOLS TO ADDRESS OBESITY

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Introduction

We live in an obesogenic era, where numerous factors conspire to promote unhealthy weight gain among significant portions of the population. Food is abundant and immense willpower is needed to resist ubiquitous temptation to over-consume. Work and recreation are largely sedentary for many who spend hours in front of computers to earn income and more hours in front of television screens in passive entertainment. The outcome of this typical, modern life of overeating and under-exercising is an epidemic of weight gain; there is a fundamental mismatch¹ between our physical needs and our “hostile food environment.”²

Rising rates of overweight and obesity, particularly among children, are a growing public health problem. Being overweight or obese is linked with numerous diseases, including type 2 diabetes, heart disease, hypertension and certain cancers; “...globally, being either overweight or obese has been estimated to be the seventh most significant risk factor for mortality and the

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1 I borrow the term “mismatch” from Peter Gluckman and Mark Hanson, *Mismatch: Why Our World No Longer Fits Our Bodies* (Oxford: Oxford University Press, 2006), see esp. pp. 158-177 for their discussion of obesity and metabolic mismatch.

2 I borrow this phrase from the testimony of Bruce Silverglade, Director of Legal Affairs, Center for Science in the Public Interest, before the US House of Representatives, Committee on Government Reform, *Hearings of the Role of the Government in Combating Obesity* (June 3, 2004) <<http://www.cspinet.org/new/pdf/GovReftsyt.pdf>> at 1.

eighth most significant risk factor for disease."³ Obesity may, in fact, increase morbidity more than poverty or smoking.⁴

Almost 60% of Canadian adults are overweight or obese⁵ and obesity rates have increased dramatically among children in Canada.⁶ An estimated 60% of obese children aged 5 to 10 have at least one risk factor for cardiovascular disease, such as high cholesterol or blood pressure.⁷ Children and adolescents who are overweight or obese today are likely to become obese adults and drive up rates of preventable conditions like coronary heart disease and associated health care costs and deaths.⁸

3 Nuffield Council on Bioethics, *Public Health: Ethical Issues* (London: Nuffield Council on Bioethics, 2007) at 82 ["Nuffield Council"], citing A.D. Lopez *et al.*, "Global and Regional Burden of Disease and Risk Factors, 2001: Systematic Analysis of Population Health Data" (2006) 367 *Lancet* 1747. For a comprehensive overview of health concerns associated with obesity, see Tommy L.S. Visscher & Jacob C. Seidell, "The Public Health Impact of Obesity" (2001) 22 *Annual Review of Public Health* 355.

4 R. Sturm & K.B. Wells, "Does Obesity Contribute as much to Morbidity as Poverty or Smoking?" (2001) 115 *Public Health* 229. The authors conclude (at 234): "The association of obesity with chronic conditions and poorer quality of life is at least as high, if not higher, than the association of poverty, smoking, or drinking with chronic conditions and poorer quality of life. Moreover, the prevalence of obesity is higher than that of poverty, daily smoking, or heavy drinking."

5 Michael Tjepkema, "Measured Obesity: Adult Obesity in Canada" *Nutrition: Findings from the Canadian Community Health Survey, Issue 1* (2005) online: Statistics Canada <<http://www.statcan.ca/english/research/82-620-MIE/2005001/pdf/aobesity.pdf>>. Overweight refers to body mass index ("BMI") between 25 and 29.9 and obese refers to BMI above 30. Levels of morbid obesity in Canada (BMI above 40) increased 225% between 1985 and 2003: P.T.Katzmarzyk & C. Mason, "Prevalence of Class I, II and III Obesity in Canada" (2006) 174:2 *Canadian Medical Association Journal* 156.

6 M.S. Tremblay, *et al.*, "Temporal Trends in Overweight and Obesity in Canada, 1981-1996" (2002) 26:4 *International Journal of Obesity* 538. In childhood obesity, Canada ranks fifth out of 34 OECD countries. See Canada, House of Commons, Standing Committee on Health, *Healthy Weights for Healthy Kids*, 39th Parliament, 1st Session (March 2007) online: House of Commons <<http://www.ccfm.ca/pdfs/HealthyWeightsForHealthyKids.pdf>> at 1.

7 Institute of Medicine, *Preventing Childhood Obesity: Health in the Balance* (Washington, DC: National Academies Press, 2004).

8 Kirsten Bibbins-Domingo *et al.*, "Adolescent Overweight and Future Adult Cor-

Obesity and related conditions have major economic impacts: they drive public health care expenditures and have indirect economic costs in terms of lost productivity, disability and premature death.⁹ Some fear that “[s]kyrocketing obesity levels may portend an epidemic of chronic diseases and related treatment costs that threaten to overwhelm the public and private sectors.”¹⁰ Annual total costs of obesity in Canada and the US have been calculated respectively at \$4.3 billion¹¹ and \$139 billion.¹² It has been estimated in the US that “[l]ower obesity rates alone could produce productivity gains of \$254 billion and avoid \$60 billion in treatment expenditures per year.”¹³

Many factors interact in complex ways to affect body weight, including individual biological factors (genetic predisposition, age, sex); social, economic and cultural factors (income, education, cultural norms regarding food); lifestyle, behavioral and health factors (eating patterns, activity levels); and environmental factors (food availability and cost; community environment; industry behaviour, such as food marketing and labeling, menu items and serving sizes).¹⁴ Considering the enormous costs associated with

onary Heart Disease” (2007) 357 *New England Journal of Medicine* 2371. The authors attribute over 100,000 excess deaths from coronary heart disease by 2036 to current rates of overweight adolescents. A retrospective study published in the same issue of this journal confirmed a positive association between adolescent overweight and higher adult risk of coronary heart disease: Jennifer L. Baker, Lina W. Olsen & Thorkild I.A. Sorensen, “Childhood Body-Mass Index and the Risk of Coronary Heart Disease in Adulthood” (2007) 357 *New England Journal of Medicine* 2329.

9 C.L. Birmingham, *et al.*, “The Cost of Obesity in Canada” (1999) 160:4 *Canadian Medical Association Journal* 483 and E. Finkelstein *et al.*, “The Costs of Obesity Among Full-time Employees” (2005) *American Journal of Health Promotion* (Sept-Oct) 45.

10 Milken Institute, *An Unhealthy America: The Economic Burden of Chronic Disease – Charting a New Course to Save Lives and Increase Productivity and Economic Growth* (Santa Monica, CA: Milken Institute, 2007) at 3.

11 P.T. Katzmarzyk & I. Janssen, “The Economic Costs Associated with Physical Inactivity and Obesity in Canada: An Update” (2004) 29:1 *Canadian Journal of Applied Physiology* 90.

12 E. Finkelstein *et al.*, “Economic Causes and Consequences of Obesity” (2005) 26 *Annual Review of Public Health* 239.

13 Milken Institute, *supra* note 10 at 2.

14 Kim D. Raine, *Overweight and Obesity in Canada: A Population Health Perspective* (Ottawa: Canadian Institute for Health Information, 2004).

obesity, many levels of government – from municipalities to national departments of health – are turning much attention to regulatory and policy interventions that may be implemented to address some of these factors in an attempt to control this public health epidemic. Indeed, obesity has been termed the “new frontier of public health law.”¹⁵

In this paper, I examine the use of legal tools to address rising rates of overweight and obesity. In particular, I address measures aimed at regulating the food environment. Humans need food to survive but, increasingly, an overabundance of food, especially food that is calorie-dense and nutrient-poor, is contributing to conditions that have a negative impact on health and may even contribute to declining life expectancy.¹⁶ Legislators in many jurisdictions are enacting laws to influence or control consumer food choices and food industry practices. These include rules and restrictions on food labeling, advertising, ingredients and access. Law as a tool to address obesity also includes litigation by private or public plaintiffs against food manufacturers or others who are alleged to engage in legally actionable conduct that promotes obesity. Litigation is outside the scope of this article, but has been addressed elsewhere.¹⁷

I begin with an overview of the role of regulation in public health and discuss justifications for legislative intervention to address health risks and problems. I briefly consider arguments about the appropriate role of the state in regulating an area – food choices and body weight – that some consider a matter of personal responsibility. In my view, government regulatory intervention is warranted to address the complex range of factors that create obesogenic environments. The challenge, however, is to identify suitable targets and types of public health interventions. As many factors influence unhealthy levels of weight gain, a vast number of regulatory interventions may be implemented and I summarize various interventions that focus on food environments. I elaborate on two specific regulatory initiatives: first, disclo-

15 Michelle M. Mello, David M. Studdert & Troyen A. Brennan, “Obesity – The New Frontier of Public Health Law” (2006) 352:24 *New England Journal of Medicine* 2601.

16 S.J. Olshansky *et al.*, “A Potential Decline in Life Expectancy in the United States in the 21st Century” (2005) 352:11 *New England Journal of Medicine* 1138.

17 See e.g. Theodore H. Frank, “A Taxonomy of Obesity Litigation” (2006) 28:3 *University of Arkansas at Little Rock Law Review* 427 and Richard A. Daynard, P. Tim Howard & Cara L. Wilking, “Private Enforcement: Litigation as a Tool to Prevent Obesity” (2004) 3-4 *Journal of Public Health Policy* 408.

sure of calorie content in foods, especially those purchased in restaurants and fast food outlets and, second, restrictions on food advertising aimed at children. I discuss the prospects of these regulatory measures in influencing food choices and, more importantly, in helping control rates of obesity.

Regulation imposes burdens in costs of compliance and enforcement and, often, in liberty restrictions. These burdens should be outweighed by the positive effects of the intervention on mitigating a public health problem. Public health interventions, however, have often not been subject to systematic evaluation to determine if they achieve their intended goals, thus making it difficult to defend and prioritize interventions. In the final section of this paper, I comment on the need for evaluation of public health interventions aimed at addressing obesity. Only through appropriate evaluation will we know if piling on the laws helps shed the pounds.

The Role of Regulation in Public Health

Governments engage in many activities to protect and promote the public's health, ranging from educational campaigns to raise awareness of factors that increase or decrease health risks to legal interventions that regulate conduct with the aim of improving individual and population health. Gostin identifies three bases on which public health interventions are justified: (1) to prevent risks to others; (2) to protect incompetent persons; and (3) to prevent risks to self.¹⁸ Gostin summarizes these justifications:

The first justification is the standard, well-accepted idea that government may intervene to prevent harm to others or punish individuals for inflicting harm. The second justification supports government action to protect the health and safety of those who are incapable of safeguarding their own interests. The third justification, and by far the most controversial, is paternalism; the protection of the health or safety of competent individuals irrespective of their own expressed wants and desires.¹⁹

Classic examples of public health powers involve regulating conduct to prevent spread of disease to others. Persons with communicable diseases

18 Lawrence O. Gostin, "General Justifications for Public Health Regulation" (2007) 121 *Public Health* 829.

19 *Ibid.*

have long been subject to restrictions on their liberty, such as compulsory screening for symptoms of disease and quarantine to prevent contact with others. Obesity, however, is not communicable in a traditional sense – though obesity does tend to spread through social networks²⁰ – and food consumption and physical activity are viewed as matters of personal choice, making government interventions contentious. As Australian jurist, Jethro Brown, wrote in 1912, “it is one thing to insist that a man shall have his house connected with a system of deep drainage; it is quite another thing to insist that he shall practise calisthenics or that he shall go to bed at a reasonable hour.”²¹ This view is shared by some contemporary legal scholars who claim that “[i]n the private realm of diet and exercise, the state should assert itself gently.”²²

Autonomous individuals make their own choices about food and physical activity, but numerous environmental factors influence and constrain these choices. The money, time and knowledge to make informed, healthy eating decisions are not equally distributed in populations. Foods we are advised to eat most frequently, such as fresh fruits and vegetables, are notoriously more expensive than much nutrient-poor, energy-dense food. The additional cost of a healthier food basket has been quantified at almost \$40 for a bi-weekly shopping list.²³ The built environment – urban sprawl, ac-

20 Nicholas A. Christakis & James H. Fowler, “The Spread of Obesity in a Large Social Network over 32 Years” (2007) 357 *New England Journal of Medicine* 370. The authors theorized (at 371): “To the extent that obesity is a product of voluntary choices or behaviors, the fact that people are embedded in social networks and are influenced by the evident appearance and behaviors of those around them suggests that weight gain in one person might influence weight gain in others. Having obese social contacts might change a person’s tolerance for being obese or might influence his or her adoption of specific behaviors (e.g., smoking, eating, and exercising).” Their study found that a person’s likelihood of becoming obese increased if a friend, sibling or spouse became obese (increases of 57%, 40% and 37%, respectively).

21 Jethro Brown, *The Underlying Principles of Modern Legislation* (London: John Murray, 1914) at 169-170, quoted in Christopher Reynolds, *Public Health Law and Regulation* (Sydney: The Federation Press, 2004) at 207.

22 M. Gregg Bloche, “Obesity and the Struggle Within Ourselves” (2004-2005) 93 *Geo. L.J.* 1335 at 1353.

23 Karen M. Jetter & Diana L. Cassady, “The Availability and Cost of Healthier Food Alternatives” (2006) 30:1 *American Journal of Preventive Medicine* 38.

cess to green spaces and recreational opportunities, availability of pedestrian corridors and bicycle lanes, and location of food outlets – also affects food and activity choices.²⁴ Increasingly, obesity is described as an environmental disease²⁵ and while “the individual is ultimately responsible for his lifestyle ... the importance and the influence of the environment on his behaviour”²⁶ must be recognized.

A comprehensive review of environmental influences on eating and physical activity summarizes recent changes that likely promote unhealthy weight gain:

They include increases in the availability and marketing of food products, particularly “fast food” and other prepackaged convenience foods that are eaten away from home, increased time spent in sedentary forms ... and changes in the dynamics of family life driven by increased affluence and social conditions, such as dramatic increases in the proportion of women who work. Although some recent environmental trends seem more favorable, such as the increased availability and use of facilities for physical fitness, the

24 For discussion, see e.g. Institute of Medicine, *Does the Built Environment Influence Physical Activity? Examining the Evidence – Special Report 282* (Washington, DC: National Academies Press, 2005); R. Ewing, et al., “Relationship between urban sprawl and physical activity, obesity and morbidity” (2003) 18:1 *American Journal of Health Promotion* 47; and Julie Samia Mair, Matthew W. Pierce & Stephen S. Teret, *The Use of Zoning to Restrict Fast Food Outlets: A Potential Strategy to Combat Obesity* (Center for Law and the Public’s Health, Georgetown and Johns Hopkins Universities, 2005) online:

<<http://www.publichealthlaw.net/Zoning%20Fast%20Food%20Outlets.pdf>>.

25 For example, the 2006 report of the British Columbia Select Standing Committee on Health states (at 13) that obesity is “an environmental disease formed by the interaction of a multitude of factors. Such factors range from the media and marketing messages that bombard children daily, to whether a child has access to safe areas to participate in physical activities, to a parent’s ability to provide healthy food.” See *A Strategy for Combatting Childhood Obesity and Physical Inactivity in British Columbia*, online: <<http://www.leg.bc.ca/CMT/38thparl/session-2/health/reports/Rpt-Health-38-2-29Nov2006.pdf>>.

26 Commission of the European Communities, *White Paper on a Strategy for Europe on Nutrition, Overweight and Obesity related Health Issues* (May 2007) online: <http://ec.europa.eu/health/ph_determinants/life_style/nutrition/documents/nutrition_wp_en.pdf> at 3.

cumulative effect of recent changes in the environment are clearly disastrous from the perspective of obesity.²⁷

While modern environments of sedentary lifestyles and constant access to cheap, energy-dense food put almost everyone at risk for weight gain, some groups are particularly vulnerable to factors that promote obesity.²⁸ People with lower levels of income and education have higher rates of obesity²⁹ and, paradoxically, food insecurity is a risk factor for obesity.³⁰ Obesity rates have also increased dramatically among children, who often have little control over the food they eat and their opportunities for physical activity. Children depend on adults for food and parental food choices exert a strong influence on children's preferences for and attitudes about foods.³¹

27 Simone A. French, Mary Story & Robert W. Jeffery, "Environmental Influences on Eating and Physical Activity" (2001) 22 *Annual Review of Public Health* 309 at 328. For further discussion of environmental influences on weight gain, see e.g. J.O. Hill and J.C. Peters, "Environmental Contributions to the Obesity Epidemic" (1998) 280 *Science* 1371. In regard to changing family dynamics, a recent study of 3085 children born between 2000 and 2002 in the UK revealed that a child's chance of becoming overweight increased in proportion with every ten hours per week the mother worked outside the home. This relationship was only significant for households with annual income of \$57,750 US or higher. The authors conclude: "Long hours of maternal employment, rather than lack of money may impede young children's access to healthy foods and physical activity. Policies supporting work – life balance may help parents reduce potential barriers." See S.S. Hawkins, T.J. Cole and C. Law, "Maternal Employment and Early Childhood Overweight: Findings from the UK Millennium Cohort Study" (2008) 32 *International Journal of Obesity* 30 at abstract.

28 I refer here not just to environmental factors, but to all factors, including biological and genetic factors that are not yet well understand. For discussion, see e.g. Alfredo Martínez-Hernández, Luís Enríquez, María Jesús Moreno-Moreno & Amelia Martí, "Genetics of Obesity" (2007) 10 *Public Health Nutrition* 10a.

29 Adam Drewnowski and S.E. Specter, "Poverty and Obesity: The Role of Energy Density and Energy Costs" (2004) 79:1 *American Journal of Clinical Nutrition* 6.

30 See e.g., P.P. Basiotis & M. Lino, "Food Insufficiency and Prevalence of Overweight among Adult Women" (2002) 26 *Nutrition Insights* 1.

31 See e.g., Leann L. Birch, "Development of Food Preferences" (1999) 19 *Annual Review of Nutrition* 41 and Chrisa Arcan *et al.*, "Parental Eating Behaviours, Home food environment and adolescent intakes of fruits, vegetables and

Aboriginal populations in many countries also have dramatically higher rates of obesity. Aboriginal Canadians are almost twice as likely to be obese and have high incidence of diabetes.³² In New Zealand, indigenous Maori and Pacific people have up to triple the risk of diabetes and younger onset of the disease as New Zealanders of European descent.³³ In the US, American Indians have high rates of overweight and obesity, with highest prevalence among indigenous groups in Arizona where 80% of women and nearly 70% of men are overweight.³⁴

Current obesity trends, associated serious morbidity risks, consequent socio-economic costs and particular harms to vulnerable groups warrant state intervention to address environmental factors that promote obesity. Characterizing obesity as a matter of individual choice and consequences will exacerbate the social and personal harms.³⁵ The question, then, is how governments ought to intervene. What are possible targets and types of interventions that may be used to address factors linked with obesity and,

dairy foods: longitudinal findings from Project EAT" (2007) 10:11 Public Health Nutrition 1257. Interestingly, parental influences on children's physical activity have been found to be weak, especially in adolescent years. See e.g., Norman Anderssen, Bente Wold & Torbjorn Torsheim, "Are Parental Health Habits Transmitted to Their Children? An Eight Year Longitudinal Study of Physical Activity in Adolescents and Their Parents" (2006) 29:4 Journal of Adolescence 513.

32 Canadian Population Health Initiative, *Improving the Health of Canadians* (Ottawa: Canadian Institute for Health Information, 2004).

33 New Zealand House of Representatives, *Inquiry into Obesity and Type 2 Diabetes in New Zealand*. Report of the Health Committee, 48th Parliament, August 2007 (Sue Kedgley, Chairperson) at 10.

34 Thomas K. Welty *et al.*, "Cardiovascular Disease Risk Factors in American Indians: The Strong Heart Study" (1995) 142:3 American Journal of Epidemiology 269.

35 Others argue contrariwise that excessive government intervention, not obesity, is the real problem. Epstein writes: "In light of the enormous attention that the question of obesity has generated, how should we respond? Individually, not collectively, seems the better approach. Better a bit of self-control than a ton of state initiatives. In light of shaky science and inflated claims, a dose of individual self-control is the only viable option. It does not rest on some necessary truth about the autonomy of Kantian individuals, but simply on practical necessity. No sane person would trust his diet and lifestyle to a benevolent social planner." Richard A. Epstein, "What (not) to do about Obesity: A Moderate Aristotelian Answer" (2004-2005) 93 Geo. L.J. 1361 at 1385.

further, what evidence is available or needed to demonstrate their efficacy and effectiveness?

The Targets and Types of Public Health Intervention

To address obesity, various domains may be the target of regulation, including the informational environment (do people have sufficient information to enable healthy lifestyle choice?), the built environment (do communities in which individuals live facilitate healthy lifestyle choices?), the educational environment (do school settings promote healthy weights for children?) and the socio-economic environment (do economic and other conditions help or hinder healthy choices?).³⁶ Fundamentally, it is argued that “[g]overnments can help to structure the physical and social environment to help people make healthier choices.”³⁷

Once a public health problem is identified, governments may select among eight types of public health interventions, ranging from least to most coercive: (1) do nothing or simply monitor a situation; (2) provide information; (3) enable choice; (4) guide choices through changing the default policy; (5) guide choices through incentives; (6) guide choices through disincentives; (7) restrict choice; and (8) eliminate choice.³⁸ Each of these types of interventions is relevant in measures to address environmental factors associated with obesity. In Canada, governmental bodies collect data to monitor trends in rates of overweight and obesity. For example, Statistics Canada’s national Health Measures Survey collects height, weight and other measures to provide more accurate information that is “essential to evaluate the true extent of problems associated with such major health concerns as obesity, hypertension and cardiovascular disease.”³⁹ Health Canada disseminates Canada’s Food Guide to provide information about healthy nutrition

36 Lawrence O. Gostin, “Fast and Supersized: Is the Answer to Diet by Fiat?” (2005) *Hastings Center Report* (March-April) 11.

37 Gostin, *supra* note 18 at 833. See also Lawrence O. Gostin, “Law as a Tool to Facilitate Healthier Lifestyles and Prevent Obesity” (2007) 297 *Journal of the American Medical Association* 87.

38 Nuffield Council, *supra* note 3, see Box 3.2, “The Intervention Ladder”.

39 Statistics Canada, *Canadian Health Measures Survey: Information for Survey Participants* (2007) online: Statistics Canada < <http://www.statcan.ca/english/survey/household/measures/measures.htm#Q1>>.

choices.⁴⁰ Indian and Northern Affairs Canada funds a Food Mail program to help deliver nutritious, perishable foods (including fresh fruits, vegetables and dairy products) to isolated northern communities to enable healthier choices for residents.⁴¹ In school settings, provincial governments and local school boards are changing default options for food served or sold in schools to guide students in making healthier choices. For example, milk and unsweetened fruit and vegetable juices may replace soft drinks in school vending machines.⁴² Subsidizing the cost of healthier food and taxing energy-dense, nutrient-poor foods are examples of guiding choice through incentives and disincentives.⁴³ Statutory limits on the allowable content of trans fats in food products restricts industry choices about product formulation⁴⁴ and statutory bans on food advertising during children's television programming eliminates industry choice to market their products through that medium.

Regulatory Interventions to Address the Food Environment: Informing and Restricting

Numerous regulatory approaches may be used to address environmental factors associated with obesity.⁴⁵ In this section, I explore in more detail two examples of legal interventions: first, regulations that require disclosure of

40 Online: Health Canada

<http://www.hc-sc.gc.ca/fn-an/food-guide-aliment/index_e.html>.

41 Online: Indian and Northern Affairs Canada

<http://www.ainc-inac.gc.ca/ps/nap/air/1brofoomai_e.html>.

42 See e.g. Ontario's *Healthy Foods for Healthy Schools Act*, S.O. 2008, C. 2 (received Royal Assent, 27 April 2008) that empowers the Minister of Education to set policies and regulations governing nutrition standards of foods in schools and regulates trans fat levels of foods sold in schools. Online: Government of Ontario <http://www.ontla.on.ca/bills/bills-files/39_Parliament/Session1/b008.pdf>.

43 For discussion, see e.g. Sean B. Cash, David Sunding & David Zilberman, "Fat Taxes and Thin Subsidies: Prices, Diet, and Health Outcomes" (2005) 2 *Acta Agriculturae Scandinavica*, Section C – Food Economics 167.

44 For further discussion of legal and policy responses to trans fats, see Nola M. Ries, "Food, Fat and the Law: A Comment on Trans Fat Bans and Public Health" (2007) 23 *Windsor Review of Legal and Social Issues* 17.

45 For comprehensive analysis of legislative and policy actions in the United States aimed at controlling obesity and improving access to healthy food and opportunities for physical activity, see the National Conference of State Legislatures

calorie and nutrient information of food products; and second, regulations that restrict food advertising targeted at children. The first type of regulation seeks to enable consumer choice by mandating disclosure of product information that is generally relevant to healthier food choices. Requiring disclosure may also be considered as a form of penalty that could motivate food industry change; if manufacturers and restaurants must disclose calorie and nutrient details, they may be motivated to reformulate their products to have fewer calories, less fat and less sugar to appeal to health-conscious consumers. Regulation of food advertising aimed at children seeks to protect a vulnerable and naive group by restricting or prohibiting food industry marketing practices. This section summarizes regulatory examples in these two areas and discusses the benefits and limits of these types of regulations.

1. Provision of Information: Disclosure of Calorie and Nutrient Information

Food labeling represents a form of regulation that targets industry and presumably benefits consumers by enhancing their ability to make informed food choices. Labeling rules may require disclosure of calorie and nutrient content, stipulate warnings (e.g. for high fat foods), or permit health claims. In Canada, the *Food and Drugs Act*⁴⁶ and Food and Drug Regulations⁴⁷ make nutrition labels mandatory for many pre-packaged food products.⁴⁸ Nutrition labels in a prescribed format must provide calorie information per serving size and measures of thirteen core nutrients, including their percentage of daily recommended intake.⁴⁹ Following amendments in 2003,

database on Healthy Eating, Physical Activity and Food Systems to Support Healthy Communities: online

<<http://www.ncsl.org/programs/health/KelloggHealthOverview.htm>>.

46 R.S., 1985, c. F-27.

47 C.R.C. c. 870.

48 Amendments to the *Food and Drugs Regulations* were enacted in 2003 and phased-in compliance required large food manufacturers to meet new nutrition label requirements by December 2005 and smaller manufacturers to adopt them by December 2007. See *Regulations Amending the Food and Drug Regulations (Nutrition Labelling, Nutrient Content Claims and Health Claims)* SOR 2003-11, s.B.01.603, online: Canada Gazette
<<http://canadagazette.gc.ca/partII/2003/20030101/html/sor11-e.html>>.

49 See Food and Drugs Regulation, Schedule L for details on the prescribed "Food Facts Table."

the regulations allowed certain claims on food labels, such as claims that a product is low in fat, sodium, cholesterol, sugar or overall calories, or that it is a source of fibre, protein or omega-3 polyunsaturated fatty acids.⁵⁰ Diet-related health claims are also permissible, such as label statements that “A healthy diet rich in a variety of vegetables and fruit may help reduce the risk of some types of cancer” or “A healthy diet low in saturated and trans fats may reduce the risk of heart disease.”⁵¹

While these types of rules aim to provide factual, useful information to consumers in a consistent, comprehensible format, various deficiencies with the practical utility of nutrition labels have been noted. Many people do not read or understand them. Those who do read and understand the labels may nonetheless ignore the information in their purchasing and consumption decisions. In a 2005 systematic review of literature on consumer understanding of nutrition labeling, Cowburn and Stockley conclude that “[a]lthough reported use of nutrition labels is high, more objective measures suggest that actual use of nutrition labelling during food purchase may be much lower.”⁵² While consumers may read and understand some label information, more complex information may be confusing and there is “little existing evidence about a link between nutrition labelling use and diet quality.”⁵³ In its own focus group research, Health Canada found that consumers have difficulty understanding food labels: “Participants across the country are unsure of nutrition facts and of how to use the information that currently exists on food labels effectively. Additionally they bring a degree of skepticism to the label reading process: although they like the nutrition facts, nutrition claims need to be discounted as ‘advertising’ they say.”⁵⁴

50 See Food and Drugs Regulation, Section B.01.603, for a complete list of permitted statements and claims and conditions for their use.

51 See Food and Drugs Regulation, Section B.01.603.

52 Gill Cowburn & Lynn Stockley, “Consumer Understanding and Use of Nutrition Labelling: A Systematic Review (2005) 8:1 Public Health Nutrition 21 at 26. For a 2007 review that largely confirms Cowburn’s and Stockley’s findings, see Klaus G. Grunert & Josephine M. Wills “A review of European research on consumer response to nutrition information on food labels” (2007) 15:5 Journal of Public Health 1613.

53 Cowburn & Stockley, *ibid.*, at 27.

54 This finding is based on six focus groups in six cities and three additional focus groups with diabetics conducted in September 2000 among people aged 18 to 44 who were interested in health issues and responsible for grocery shopping.

In addition to confusion about understanding label information or limited use of labels, legislation typically applies only to pre-packaged foods and consumers often have little or no calorie and nutrient information at point-of-sale for foods purchased in restaurants, fast food outlets, cafeterias and other food service facilities. This is a huge informational gap as the frequency of food consumption outside the home has increased dramatically in recent years. In the US, people consume up to one-third of total daily calories from restaurant meals and purchases of foods consumed away from home now account for half of all food expenditures.⁵⁵ Similar trends are evident in Canada.⁵⁶

To remedy this information gap, some jurisdictions are imposing rules to require food service establishments to disclose calorie and other nutritional information to customers on menus, menu boards or through other readily accessible means (such as computer terminals) prior to ordering. To address the “relentlessly upward”⁵⁷ trajectory of overweight and obesity among residents, the City of New York recently amended its Health Code to require restaurants that already make calorie information publicly available (for example, on a company website or tray liners) to post this information on menus and menu boards. The regulation initially took effect July 1, 2007, but was successfully challenged by the New York State Restaurant Association on the grounds that it was preempted by federal law.⁵⁸ In response, the Department

Health Canada, Food and Nutrition, *Research: Nutrition Label Message Testing*, online: Health Canada <http://www.hc-sc.gc.ca/fn-an/label-etiquet/nutrition/res-rech/mess_testing-verification_mess_e.html>.

55 Hayden Stewart, Noel Blisard & Dean Jolliffe, *Let's Eat Out: Americans Weigh Taste, Convenience and Nutrition*, Economic Information Bulletin No. 19, October 2006 (United States Department of Agriculture, Economic Research Service) online: <<http://ers.usda.gov/publications/eib19/eib19.pdf>>.

56 Trans Fat Task Force, *TRANSforming the Food Supply, Final Report of the Trans Fat Task Force* (June 2006) online: Health Canada <http://www.hc-sc.gc.ca/fn-an/alt_formats/hpfb-dgpsa/pdf/nutrition/tf-gt_rep-rap_e.pdf>.

57 New York City Department of Health and Mental Hygiene, Board of Health, *Notice of Intention to Repeal and Reenact §81.50 of the New York City Health Code, Notice of Public Hearing* (18 October 2007) online: New York City Department of Health and Mental Hygiene <<http://www.nyc.gov/html/doh/downloads/pdf/public/notice-intention-hc-art81-50-1007.pdf>> [“Notice of Intent”].

58 *New York State Restaurant Association v. New York City Board of Health, et al.* (United States District Court Southern District of New York) 11 September 2007. At the

of Health proposed amended regulations that survived legal challenge and took effect in April 2008.⁵⁹

The Department of Health took this step to address the “calorie information gap,”⁶⁰ arguing that more accessible calorie disclosure “would enable New Yorkers to make more informed, healthier choices and can reasonably be expected to reduce obesity and the many related health problems which obesity causes.”⁶¹ A 2007 survey of major restaurant chains in the city found the average calorie content of a lunchtime meal purchase to exceed 800 calories, with approximately one-third of customers purchasing over 1000 calories,⁶² amounts that provide at least half of daily calorie needs for many people. Further, much evidence reveals that consumers – and even nutrition professionals – underestimate the number of calories in restaurant meals.⁶³

time of the legal challenge to New York City’s regulation, 17 similar regulations were in force or under consideration throughout the US.

59 The amendment to Section 81.50 of the Health Code states: “All menu boards and menus in any covered food service establishment shall bear the total number of calories derived from any source for each menu item they list. Such information shall be listed clearly and conspicuously, adjacent or in close proximity such as to be clearly associated with the menu item, using a font and format that is at least as prominent, in size and appearance, as that used to post either the name or price of the menu item.” This regulation, restricted to chain restaurants with 15 or more outlets across the country, affects approximately 10% of restaurants in New York City. See Notice of Intent, *supra* note 57.

60 *Ibid.* at 8.

61 *Ibid.* at 3.

62 *Ibid.* at 6.

63 See e.g. Brian Wansink and Pierre Chandon, “Meal Size, not Body Size, Explains Errors in Estimating the Calorie Content of Meals” (2006) 145:5 *Annals of Internal Medicine* 326, Lisa R. Young & Marion Nestle, “Portion Sizes and Obesity: Responses of Fast-Food Companies” (2007) 28 *Journal of Public Health Policy* 238 and Lisa R. Young & Marion Nestle, “Portion Sizes in Dietary Assessment: Issues and Policy Implications” (1995) 53 *Nutrition Reviews* 149. For a study testing dietitians’ ability to estimate calorie content of restaurant meals, see e.g. J. Backstrand, M.G. Wootan, L.R. Young and J. Hurley, *Fat Chance* (Washington, DC: Center for Science in the Public Interest, 1997).

Surveys indicate many consumers favour more accessible disclosure of calorie and nutrient information in food service outlets.⁶⁴ Yet, if restaurants are required to disclose calorie information on menus and menu boards, the question remains whether consumers will actually understand and use this information to choose meals with fewer calories. Some preliminary studies suggest that consumers who see calorie information posted at point-of-purchase in a fast food outlet select meals with fewer calories.⁶⁵ Following enactment of mandatory labeling laws in the United States, sales of some high-fat products declined significantly, suggesting consumers used the label information in their purchase decisions.⁶⁶ However, disclosure of calorie information will only be useful if consumers have an understanding of their appropriate daily calorie intake to maintain a healthy weight.

Legislating disclosure of calorie and nutrient information arguably helps consumers make more knowledgeable purchasing decisions. This intervention is of minimal intrusion on liberties as it simply provides information and leaves the choice of using that information to consumers, nonetheless, the underlying motivation of additional disclosure of calorie information is paternalistic. As one advocate expresses it:

As the rate of, and number of, cases of obesity increase, legislation should dictate that menus disclose fat, calories and cholesterol content of food items. Legislation must protect consumers from

64 Lionel Thomas & Juline E. Mills, "Consumer knowledge and expectations of restaurant menus and their governing legislation: a qualitative assessment" (2006) 17 *Journal of Foodservice Business Research* 6 and D.A. Carange, M.T. Conklin & C.U. Lambert, "Effect of Nutritional Information in Perceptions of Food Quality, Consumption Behaviour and Purchase Intentions" (2004) 7 *Journal of Foodservice Business Research* 43. The *New York Times* reported that a 2005 survey conducted by the food service company, Aramark, found that 83% of respondents (N=5297) wanted better disclosure of nutrition information in restaurants. See Roni Caryn Rabin, "Calorie Labels May Clarify Options, Not Actions" *New York Times* (17 July 2007).

65 Notice of Intent, *supra* note 57 at 6. A study of 1816 Subway customers at 47 locations throughout New York City indicated that those who saw the posted calorie information selected meals with fewer calories, though the calorie reduction ranged from 48 and 92 fewer calories on average.

66 Alan D. Mathios, "The Impact of Mandatory Disclosure Laws on Product Choices: An Analysis of the Salad Dressing Market" (2000) 43:2 *Journal of Law and Economics* 651.

themselves because as evidenced by the rising number of health complications, partially due to poor eating habits, consumers are continually showing that they are unable or do not have the discipline to protect themselves from their behaviors.⁶⁷

2. Control of Information: Restricting Food Advertising Targeted at Children

Children and youth represent a significant portion of the food and beverage market. In 2002 in the US, sales of food and beverages to young people exceeded \$27 billion.⁶⁸ In 2004, food and beverage advertising expenditures directed at children and youth amounted to \$15 billion, a substantial increase from approximately \$2 billion in 1999.⁶⁹ Children exert important influence over parental food (and other product) purchasing decisions; one estimate suggests that, in 2002, “children aged four to twelve directly influenced \$310 billion of adult purchasing and evoked another \$340 billion.”⁷⁰ Television remains the most popular medium for food advertising, though Internet sites, event sponsorship and product placement in children’s movies are also important marketing tools.⁷¹

A major study examining the daily number of food ads children see on TV found that two- to seven-year-olds see 12 ads each day, eight- to 12-year-olds see 21 ads and thirteen- to seventeen-year-olds see 17 ads each day.⁷² Nearly three-quarters of ads are for candy, snacks, cereals and fast food that are high in fat, sugar and salt (often referred to as “HFSS foods”). With the exception of a few ads for fruit juice, fruits and vegetables are not part of children’s food advertising. Pre-teen groups see only one public

67 Thomas & Mills, *supra* note 64 at 19.

68 Jeffrey P. Koplan, Catharyn T. Liverman & Vivica I. Kraak, Eds., *Preventing Childhood Obesity: Health in the Balance* (Washington DC: The National Academies Press, 2005) at 153 and 172.

69 Juliet B. Schor & Margaret Ford, “From Tastes Great to Cool: Children’s Food Marketing and the Rise of the Symbolic” (2007) 35:1 *Journal of Law, Medicine and Ethics* 10 at 11.

70 *Ibid.* at 11.

71 *Ibid.*

72 The Henry J. Kaiser Family Foundation, *Food for Thought: Television Food Advertising to Children in the United States* (March 2007) online: <<http://www.kff.org/entmedia/upload/7618.pdf>>.

service announcement related to nutrition and fitness every two or three days and teens see less than one such announcement each week. This study concludes that “food marketing is a predominant part of the television advertising landscape for children, and that young people’s exposure to such messages is substantial, while their exposure to countervailing health messages on TV is minimal.”⁷³

The pervasiveness of advertising of HFSS foods has prompted calls for legislative restrictions on television advertising directed at children. In Canada, various organisations including the Centre for Science in the Public Interest and the Heart and Stroke Foundation advocate regulatory limits on advertising aimed at children⁷⁴ and, in 2004, a member of the Senate attempted (unsuccessfully) to stimulate legislative reform “to curb child-directed advertising that encourages poor nutrition and physical inactivity.”⁷⁵ Quebec is unique in Canada in prohibiting commercial advertising directed at children under age 13.⁷⁶ In the rest of Canada, the advertising industry follows a self-regulatory Broadcast Code for Advertising to Children⁷⁷ and the Canadian Code of Advertising Standards.⁷⁸ The Children’s Code applies to commercial messages shown during children’s (those under 12) programming and also to ads aimed at children that air during other programs. The Code stipulates that ads “must not *directly* urge children to purchase or urge them to ask

73 *Ibid.*, at 4. A June 2007 Federal Trade Commission report into children’s exposure to TV ads reported similar statistics, but states that exposure has not increased since a similar study done in 1977. Federal Trade Commission, *Children’s Exposure to TV Advertising in 1977 and 2004: Information for the Obesity Debate*. This report notes that ads for sedentary entertainment (such as movies and computer games) have increased substantially.

74 Bill Jeffery, “The Supreme Court of Canada’s Appraisal of the 1980 Ban on Advertising to Children in Quebec: Implications for ‘Misleading’ Advertising Elsewhere” (2006) 39 *Loyola Law Review* 237 at 243.

75 Hon. Mira Spivak, Senate Debates (11 May 2004).

76 *Consumer Protection Act*, R.S.Q., ch. P-40.1. For further commentary on Quebec’s legislation, see Jeffery, *ibid.*

77 Canadian Association of Broadcasters & Advertising Standards Canada, *The Broadcast Code for Advertising to Children* (April 2007) online: <<http://www.adstandards.com/en/clearance/clearanceAreas/childrensBroadcastCode.pdf>> [“Children’s Code”].

78 Advertising Standards Canada, *Canadian Code of Advertising Standards* (November 2007) online: <<http://www.adstandards.com/en/Standards/adStandards.pdf>>

their parents to make inquiries or purchases.”⁷⁹ The Code restricts product endorsements by cartoon characters, puppets and persons well-known to children, though these may appear in the ad, give factual (i.e. not promotional) statements, as well as educational messages about nutrition.⁸⁰ The Canadian Code of Advertising Standards requires that “advertising that is directed to children must not exploit their credulity, lack of experience or their sense of loyalty, and must not present information or illustrations that might result in their physical, emotional or moral harm.”⁸¹

It has been argued that these industry codes are “wholly inadequate for safeguarding children’s interests”⁸²; although the Canadian Radio-Television Commission (“CRTC”) requires broadcasters to comply with the Children’s Code as a condition of licence, “there is no evidence on record that the CRTC has ever considered violations of the Children’s Code to determine whether a license should be renewed, revoked, or subjected to additional terms.”⁸³ In March 2007, the federal Standing Committee on Health released its report, *Healthy Weights for Healthy Kids*, and endorsed a need to evaluate the adequacy of industry self-regulation of advertising directed at children.⁸⁴ There is, however, no indication of impending regulatory change in Canada.⁸⁵

79 Children’s Code, *supra* note 77 at Clause 5(a), emphasis in original.

80 *Ibid.*, at Clause 7.

81 *Supra* note 78.

82 Jeffery, *supra* note 74 at 247.

83 *Ibid.*, at 249.

84 Canada, House of Commons, Standing Committee on Health, *Healthy Weights for Healthy Kids*, 39th Parliament, 1st Session (March 2007) online: House of Commons <<http://www.cfn.ca/pdfs/HealthyWeightsForHealthyKids.pdf>>.

85 The federal government’s response to the Standing Committee recommendations regarding advertising to children states: “The Government of Canada understands the concerns related to marketing to children, and is undertaking efforts to further explore this issue. The Public Health Agency of Canada is currently examining the various methods used by marketers to reach children and the current situation in Canada. Different models for reducing the influence of marketing on children will be considered ... The feasibility and effectiveness of [regulatory] approaches, as well as self-regulation ... will be assessed.” See Government Response to the Seventh Report of the Standing Committee on Health, *Healthy Weights for Healthy Kids*, online:

<<http://cmte.parl.gc.ca/cmte/CommitteePublication.aspx?SourceId=213785>>.

The situation in the United Kingdom is different; ads for foods and beverages high in fat, salt and sugar are now restricted during television programming aimed at viewers younger than 16.⁸⁶ Effective January 1, 2008, ads for HFSS foods are prohibited during television programs aimed at children aged four to 15. This follows a July 1, 2007 ban on HFSS food ads during children's programming, including programs for pre-school children, and during shows aimed at children between ages four and nine.⁸⁷ Children's television channels have a graduated phase-in period and must reach full compliance with the new regulations by January 1, 2009.

Despite the evidence about prevalence of food advertising aimed at children, its actual influence on children's food preferences – and, more to the point, its impact on childhood obesity – is disputed. Will restrictions or bans on television ads for HFSS foods make children more likely to prefer and choose healthier foods and help prevent children from becoming overweight or obese? After comprehensive review of available research, the US Institute of Medicine concluded in a 2006 report that “[t]elevision advertising influences the food preferences, purchase requests, and diets, at least of children under age 12 years, and is associated with the increased rates of obesity among children and youth.”⁸⁸ This contrasts with the conclusion of a 2004 US paper: “Overall, our review of the available public evidence suggests that currently there is little theoretical or empirical foundation to sup-

86 Office of Communications, *Television Advertising of Food and Drink Products to Children: Final Statement* (22 February 2007) online: Office of Communications <http://www.ofcom.org.uk/consult/condocs/foodads_new/statement/statement.pdf>. Several other European countries also restrict television ads aimed at children. Since 1991, Swedish law has prohibited TV and radio ads targeted to children younger than 12 and Belgian law bans commercials during children's programming; Mary Story & Simone French, “Food Advertising and Marketing Directed at Children and Adolescents in the US” (2004) 1 *International Journal of Behavioral Nutrition and Physical Activity* 3.

87 A January 2008 report by the Advertising Standards Authority revealed high compliance (99.2% of ads) with these regulatory changes: Advertising Standards Authority, *Compliance Report – Food and Soft Drink Advertising Survey 2007* (January 2008) online: Advertising Standards Authority <<http://www.asa.org.uk/NR/rdonlyres/120B91FD-FB23-4551-A554-776822DEE333/0/FoodandSoftDrinkAdvertisingSurvey2007.pdf>>.

88 Institute of Medicine, *Food Marketing to Children and Youth: Threat or Opportunity?* (Washington, DC: National Academies Press, 2006).

port the ‘advertising causes obesity’ thesis or the inference that restrictions on food advertising would meaningfully reduce the incidence of childhood obesity.”⁸⁹

Even the telecommunications regulator that will enforce the new restrictions in the UK acknowledges that “multiple factors account for childhood obesity. Television viewing/advertising is one among many influences ... other factors include social, environmental and cultural factors, all of which interact in complex ways not yet well understood. ... a total ban on food advertising would be neither proportionate nor, in isolation, effective.”⁹⁰

In addition to debate about the efficacy of advertising restrictions, another drawback is their potential infringement of constitutionally-protected free speech rights, such as rights protected under s. 2(b) of the *Canadian Charter of Rights and Freedoms*.⁹¹ Quebec’s ban on commercial advertising directed at children aged 13 and younger was found by the majority of the Supreme Court of Canada to be a justifiable limitation on free speech rights,⁹² but any new attempt to restrict advertising would likely be subject to constitutional challenge. Justifying restrictions on the grounds of mitigating child-

89 Todd J. Zywicki, Debra Holt & Maureen K. Ohlhausen, “Obesity and Advertising Policy” (2004) 12 *Geo. Mason L. Rev.* 979. For additional analysis of advertising and obesity in children, see Debra M. Desrochers & Debra J. Holt, “Children’s Exposure to Television Advertising: Implications for Childhood Obesity” (2007) 26:2 *Journal of Public Policy and Marketing* 182.

90 Office of Communications, *Television Advertising of Food and Drink Products to Children: Final Statement* (22 February 2007) online: Office of Communications <http://www.ofcom.org.uk/consult/condocs/foodads_new/statement/statement.pdf>.

91 *Canadian Charter of Rights and Freedoms*, Part I of the *Constitution Act, 1982*, being Schedule B to the *Canada Act 1982* (U.K.), 1982, c. 11. Section 2(b) provides: “Everyone has the following fundamental freedoms: ... b) freedom of thought, belief, opinion and expression, including freedom of the press and other media of communication; ...”

92 *Attorney General of Quebec v. Irwin Toy Ltd.*, [1989] 1 S.C.R. 927. For discussion of constitutionality of statutory limits on tobacco advertising, see *RJR-MacDonald v. Canada (Attorney General)*, [1995] 3 S.C.R. 1995 and *Canada (Attorney General) v. JTI-Macdonald Corp.* [2007] SCC 30. Statutory prohibitions against direct-to-consumer advertising of prescription pharmaceuticals in Canada are a current target of constitutional challenge, brought by CanWest Global Communication: for discussion, see Alicia Priest, “CanWest Set to Challenge Ban on DTCA” (2007) 126:1 *Canadian Medical Association Journal* 19.

hood obesity could be a difficult argument, particularly considering conflicting evidence about the practical impact of ad restrictions on children's food choices and body weight.

Heightened concern about childhood obesity, criticism of corporate promotion of HFSS foods and fear of regulation have, nonetheless, recently prompted food companies and industry associations to adopt voluntary measures to limit advertising to children and to promote healthy eating and physical activity. The U.S. Children's Food and Beverage Advertising Initiative, comprised of representatives from ten of the largest food companies in the US, has pledged to allocate half of all television, radio, print and internet advertising aimed at children under 12 to promotion of healthier foods and lifestyles.⁹³ Major food companies operating in Canada and the European Community have announced similar self-regulatory initiatives.⁹⁴

Restrictions on child-directed advertising seek to shield children from messages that may encourage poor food choices. However, industry may point to compliance with self-regulatory codes to oppose governmental regulation. As a more coercive and legally contentious intervention, some governments may hesitate to regulate in this area.⁹⁵

Justifying Regulatory Interventions

It has been observed that "[b]ecause health is so highly valued, sometimes society assumes that government need not justify public health interventions. But government should justify interventions because, almost invariably, they intrude on individual rights and interests and incur economic

93 *Children's Food and Beverage Advertising Initiative*, online: <<http://www.us.bbb.org/WWWRoot/storage/16/documents/InitiativeProgramDocument.pdf>>.

94 For the Canadian initiative, see: <<http://www.adstandards.com/en/clearance/clearanceAreas/childrensInitiative.asp>>. For the European initiative, see Jenny Wiggins and Andrew Bounds, "Companies move to halt junk food advertising" *Financial Times* (11 December 2007) online: *Financial Times* <http://www.ft.com/cms/s/0/0d8b74bc-a71a-11dc-a25a-0000779fd2ac.html?nclick_check=1>. See also Confederation of the Food and Drink Industries: <http://www.active-lifestyle.eu/asp/our_actions/11.asp?doc_id=16>.

95 In its comprehensive report on food advertising directed at children, the US Institute of Medicine recommended that if self-regulatory models fail to produce a decline in advertising of low-nutrition foods, governments should restrict or prohibit advertising. *Supra* note 88.

costs.”⁹⁶ To assess whether specific public health interventions are justified, Gostin argues that five criteria must be met: (1) objective scientific evidence must demonstrate the existence of a significant public health risk; (2) the intervention must be reasonably capable of achieving the desired public health end; (3) economic costs of implementing and enforcing an intervention must be reasonable in comparison with the likely public health benefit of the intervention; (4) incursions into individual liberties must be reasonable in comparison with likely benefits; and (5) costs and benefits of the intervention must be distributed fairly.⁹⁷

The UK Nuffield Council adopts a similar set of questions that address concepts of balancing, suitability and necessity:

First ... a *balancing* test ... enjoins us to assess whether the aims of public health goals are sufficiently important to permit consideration of particular means, such as laws, policies or specific interventions. Secondly, a *suitability* test concerns an assessment of the degree to which a certain means will achieve the desired end. Thirdly, a *necessity* test requires that if a particular objective can be achieved by more than one means, then the means should be chosen that causes the least intrusion in the lives of the individuals or communities concerned while still achieving adequate effectiveness.⁹⁸

These questions are of critical importance. First, an intervention that does not achieve its intended goal is not worth continuing. Regulatory measures involve opportunity costs and resources that are spent on ineffective interventions could be better used for other programs and policies that are more likely to achieve a desired public health goal. Second, governmental legitimacy in the eyes of the public suffers when interventions – especially controversial ones – fail to achieve their intended outcome or do so only at great cost. Third, regulatory restrictions that lack adequate justification evidence are more vulnerable on legal challenge.⁹⁹

96 Lawrence O. Gostin, “Public Health Law in a New Century – Part III: Public Health Regulation: A Systematic Evaluation” (2000) 283:23 *Journal of the American Medical Association* 3118 at 3118.

97 *Ibid.*, see esp. pp. 3119 to 3122.

98 Nuffield Council, *supra* note 3 at para. 3.18.

99 The justification tests proposed by Gostin and the Nuffield Council are similar to the legal test in *R. v. Oakes*, [1986] 1 S.C.R. 103, for justifying state-imposed restrictions on constitutionally guaranteed rights and freedoms. Under *Oakes*, the

Despite the importance of justifying public health interventions, the evidence needed to do so is often scant. Evaluation of public health measures is “not evenly distributed across policies and programs targeting leading determinants of population health”¹⁰⁰ so, for example, a specific vaccine program may be the subject of numerous evaluations, while the impact of revised school nutrition standards may not be studied. Complex public health issues that are influenced by multiple factors – like obesity and cancer – are often addressed by multiple interventions and it is difficult to attribute a change in population-level incidence to a specific intervention. Similarly, evaluating the cumulative effects of various interventions is complex. Returning to the question my title poses, does piling on the laws help shed pounds? If rates of obesity decline, is it because of numerous interventions working together, or is it possible to identify specific measures with the largest impacts?

Evaluation typically follows implementation and it is not easy to know in advance which interventions are most likely to achieve a desired public health outcome, nor are all potential costs and benefits apparent before implementation. Certainty regarding effectiveness and distribution of benefits and burdens cannot be a prerequisite of action as few public health interventions would ever pass this bar; “[i]f all public health decisions required convincing scientific evidence, new approaches could not emerge.”¹⁰¹ However, studying experiences with interventions in other jurisdictions, consulting those who will be most directly affected by a regulatory intervention and accounting for reasonably foreseeable impacts will help in selecting among various measures.¹⁰²

following questions must be addressed: (1) Is the government’s goal sufficiently pressing and substantial to warrant restrictions on fundamental liberties? (2) Is the limit on protected rights rationally connected to achieving the identified goal? (3) Does the limit restrict rights in a minimal or substantial way? (4) Is the benefit to be gained by limiting rights proportionate to its harmful impact?

100 Laurie M. Anderson, *et al.*, “Evidence-Based Public Health Policy and Practice: Promises and Limits” (2005) 28:5S *American Journal of Preventive Medicine* 226 at 227

101 *Ibid.*, at 228.

102 For further discussion of evidence-based policy, see e.g. Mark J. Dubrow, Vivek Goel & R.E.G. Uphsur, “Evidence-Based Health Policy: Context and Utilisation” (2004) 58 *Social Science and Medicine* 207; Ray Pawson, “Evidence-Based Policy: In Search of a Method” (2002) 8 *Evaluation* 157; and J.A. Muir Gray, “Evidence Based Policy Making” (2004) 329 *British Medical Journal* 988.

Conclusions

Contemporary public health problems “are complex systems problems, with equally complex solutions; there are problems that have the potential to affect all individuals at different levels, affecting health, the sustainability of health services, and potentially the long-term economic prosperity of the country.”¹⁰³ Obesity is a clear example of a complex problem where there are no clear and easy regulatory and policy solutions since so many environmental factors influence food and physical activity behaviours. Specific regulatory measures to address obesity are likely to face opposition, from those who claim measures are unduly paternalistic and impose unjustifiable burdens to those who claim regulations do not go far enough to counter the influence of our obesogenic environments.

It has been aptly noted that regulatory measures intended to address obesity may result in “a staggering patchwork of different laws regarding policy areas that had until recently received little regulatory attention.”¹⁰⁴ Further, it is contended that “adverse effects of specific dietary practices or foods have not yet been definitively linked to obesity. Therefore, many regulatory strategies that might affect food consumption cannot yet be justified. The identification of these linkages must remain a high priority.”¹⁰⁵ The serious health, social and economic costs associated with current rates of overweight and obesity demand attention to the environmental factors that promote unhealthy weight gain. Regulatory intervention to address the problem is warranted, but the follow-on issue is to identify what specific measures should be adopted. Taken individually, specific regulatory interventions – like disclosure of calorie and nutrient information on food labels and menus, and limits on TV food advertising directed at children – may have little measurable impact on obesity in populations. But as two strategies among others, they may contribute to cumulative benefits.

103 Fiona Adshead & Allison Thorpe, “The role of the Government in public health: A national perspective” (2007) 121 *Public Health* 835 at 836.

104 *Supra* note 43 at 168.

105 Shawna L. Mercer, “Drawing possible lessons for obesity prevention and control from the tobacco control experience” in *Obesity Prevention and Public Health*, David Crawford & Robert W. Jeffery, eds. (New York: Oxford University Press, 2005) at 241.

Regulating to address factors associated with overweight and obesity is a relatively novel area of public health intervention that, not surprisingly, generates disagreement about the appropriate role of the state. New and different interventions often stir controversy; England's liquor licensing laws in the 1870s that restricted business hours for pubs and banned children from imbibing spirits in them were decried by those who argued English citizens were better "free than ... compulsorily sober."¹⁰⁶ Today, public health interventions across many areas of policy and behaviour are commonplace and unquestioned. With the aim of reversing (or at least slowing) current obesity trends, the number and types of interventions to promote healthier eating and physical activity are growing, though governments acknowledge that "[t]o demonize eating is not an option" and they cannot order people "to embrace sports or go for a long walk every day."¹⁰⁷ Governments can, however, choose among a range of public health interventions to address obesogenic aspects of modern environments and, in doing so, ought to remain mindful of the need to evaluate and justify those interventions. In time, there may be answer to the question of whether piling on the laws helps shed the pounds.

106 Karen Jochelson, "Nanny or Steward? The Role of Government in Public Health" (2006) 120 *Public Health* 1149 at 1150.

107 British Columbia Select Standing Committee on Health, *supra* note 25 at 1.