## Invited commentary

## Do food regulatory systems protect public health?

The purpose of this commentary is to consider the extent to which food regulatory systems protect public health, and how a better job could be done. There are fundamental questions about the role of food regulations in responding to changes in food systems and to food-related public health issues. What is meant by the objective 'to protect public health and safety' in the context of food regulation? Are current systems well balanced between promoting trade and protecting health? What is the role of nutrition in food regulation? Should food regulation be used to promote as well as to protect public health? Should laws and regulations be used to intervene in the formulation and marketing of foods, or should 'the market' merely provide more choices and information for shoppers and consumers to select healthy diets?

### Background

Over the past 50 years there has been an explosion in the number of food and drink products available in higher- and also now lower-income countries. Food regulatory systems – policies and laws relating to food – exist both to facilitate food trade and to protect public health.

Historically, food regulations were introduced in response to adulteration, fraud and safety concerns, often when food systems were in a state of change. For instance, modern food law and regulation began in England in 1860 with the passing of the Adulteration of Food and Drink Act, which prohibited the sale of adulterated and contaminated food that had proliferated at that time. This law followed the landmark English Public Health Act of 1848. This sought to improve the conditions of life particularly of the lower urban and also rural classes, which had generally deteriorated as a result of very rapid unregulated urbanisation and industrialization<sup>(1)</sup>.

Now, environmental, technological, social, political and economic developments, combined with increasing urbanisation and industrialisation in most countries, have resulted in food systems increasingly dominated by highly processed, 'fast', 'convenient' foods and drinks made from cheap ingredients, high in sugar, fat or salt. Is there a need for further reform of food regulatory systems in response to these developments?

#### Policy gaps and inconsistencies

Generally, the primary objective for food regulatory systems is 'to protect public health and safety'. This objective

has not been clearly defined and is open to interpretation. Food safety considerations are widely accepted as essential, but until recently there has been a struggle to have nutrition considerations recognised in food regulation deliberations.

Relevant UN agencies increasingly perceive the need for food and drink regulation to protect public health, in the setting of food standards, and in using food regulation as a policy instrument. For example, paragraphs 22 and 59 of the World Health Organization's *Global Strategy on Diet, Physical Activity and Health* (the WHO Global Strategy) refer to the need for regulations on food composition and labelling, to help enable consumers to make healthy and well-informed food choices<sup>(2)</sup>.

However, the response of many national government food agencies, and bodies such as the joint FAO/WHO Codex Alimentarius Commission (Codex), which has formal responsibility within the UN system for food regulation, remains ambiguous. The evidence shows that the emerging profile of nutrition is frequently exploited to benefit food trade rather than public health. For instance, certain interpretations of nutrition science have been coopted to liberalise voluntary food fortification permissions and to introduce health claims schemes. Such agendas, which seem to dominate the time and resources of national government food agencies and Codex nutrition and food labelling committees, may be more detrimental than beneficial to public health.

Food regulatory systems are collective products of governments' broader policy frameworks. Food is a particularly contested policy domain. There are many wide gaps between public health and political and economic priorities within and between UN agencies and national government departments. As one commentator observes, '[b]eyond providing enough food for human subsistence, economic policy makers generally have made no connection between the food industry's business activities and nutritional health issues'. (3).

Against this background it is inevitable that there exists a tension between public health and food trade priorities in the activities of food regulators. Thus, Article 1 of the statutes of Codex makes no distinction, stating that its purpose is 'protecting the health of the consumers and ensuring fair practices in the food trade'<sup>(4)</sup>.

Food policy is also subject to ideology. Since the 1980s a neo-liberal ideology has dominated international and national government political and economic policies, and thus food regulation agenda and decisions. This argues

for a limited role only for government in creating food regulatory systems. Deregulation and the removal of 'red tape' are regarded as necessary for more efficient use of resources and to allow 'the market' to create more choice.

Now, in the context of increasing concerns about public health, an alternative ideology is challenging the neo-liberal approach. There is good reason to believe that public health problems are at least in part a result of inadequately regulated markets<sup>(5)</sup>. For example, it is now commonly argued that obesity is a sign of market failure and that greater commitment to and investment in food regulation is required to help rein in market excesses<sup>(6,7)</sup>.

# The public health 'wood' and the food safety 'trees'

Food regulators stress that their policies and food standards decisions are based on sound scientific analysis and thorough review of the evidence. Much depends on what type of evidence is considered as relevant. Nutrition science is especially relevant to the work of the food regulatory system in at least two areas. These areas are risk analysis designed to protect public health and safety, and regulatory impact statements when investigating the use of food regulation to promote public health.

The current work of Codex provides insights into current attitudes to risk analysis. Codex standards are often used as benchmarks by national authorities, and it is a reference organisation for World Trade Organization agreements. In 2009 the Codex Committee on General Principles endorsed the nutritional risk analysis principles provided by the Codex Committee on Nutrition and Foods for Special Dietary Uses and recommended their adoption by the Commission<sup>(8)</sup>. According to these Principles, 'Codex nutritional risk analysis addresses nutrients and related substances and the risk to health from their inadequate and/or excessive intake. Nutritional risk analysis applies the same general approach as traditional food safety risk analysis to consideration of excessive intakes of nutrients and related substances. ... [as well as] ... considering risks directly posed by inadequate intakes, (9).

These principles frame their analysis of the relationship between food and health in terms of the relationship between individual nutrients and related substances and food safety concerns. A more inclusive risk analysis would account for the impact of proposed food composition and labelling changes on patterns of diet and disease and on social and environmental impacts, for example by evaluating whether fortification practices drive consumption towards diets with more high-fat, -salt and -sugar products.

Evaluation of the cumulative outcome of many individual food standard decisions on the profile of food supplies and thus dietary patterns indicates inconsistencies with public health nutrition policy and practice. Modern industrial food supplies proliferate in highly processed

products containing large amounts of fat, salt and sugar, often marketed with dubious food and health information, but these satisfy food safety risk analysis criteria. Food regulation policy makers seem not to be seeing the public health 'wood' for the food safety 'trees'.

Proposals to use food regulation to help promote public health often have to justify their potential benefits against potential economic impacts on commercial interests. Whereas potential costs to commercial interests resulting from the introduction of food regulation often are relatively well defined and quantified, the potential health, social and environmental costs of not intervening to address a public health nutrition problem generally are less well defined and typically are excluded from assessments.

# Decision making on an uneven and unequal playing field

Also, the decision-making processes of food regulation are not equally accessible to all interest groups. Engagement with food regulatory systems involves a lot of time, energy and resources. Few public health nutritionists are able to prepare submissions, undertake advocacy and attend meetings to inform food regulation policy and practice as part of their 'day jobs'. By contrast, major food and drink manufacturers and their representative organisations, recognising the importance of such activities, employ lawyers and nutritionists dedicated to represent their commercial interests.

Participation in decision-making processes in official forums such as Codex meetings does not always occur on a level playing field. For example, the Codex Committee on Food Labelling<sup>(10)</sup> has established an electronic working group on labelling provisions, dealing with the food ingredients identified in the WHO Global Strategy. The working group has been investigating a number of suggestions to support public health nutrition policy and practice, such as how to make it easier for the consumer to find out if there has been an addition of sugar to a product and how to provide clearer dietary guideline-related information on food labels.

However, health professional, civil society and other independent organisations are not represented in the Working Group's investigations. Its membership includes a number of Codex member countries, together with what are described as 'international non-governmental organizations'. These are the International Dairy Federation, the International Council of Beverages Associations, the Comité Européen des Fabricants de Sucre, the Institute of Food Technologists, the International Council of Grocery Manufacturers Associations, the Industry Council for Development, the Confédération des Industries Agro-alimentaires de l'UE, the International Alliance of Dietary/Food Supplement Associations, the International Federation of Margarine Associations, and the International Special Dietary Foods Industries<sup>(10)</sup>.

Invited commentary 2249

#### What can public health nutritionists do?

Food regulators so far are not adequately responding to changes in the structure and operation of modern food systems. Food regulation systems are not fulfilling their potential for protecting public health.

What can we as professionals and as a profession do?

- Be aware of the impact of laws and regulations on food supplies and thus on what populations purchase and consume. For the future, this implies that basic training in relevant law and knowledge of politics and economics, be a significant part of the training and ongoing professional development of nutritionists.
- Be prepared to act as a profession. Collective action and agreed policy positions that involve all relevant actors are needed to impress and influence national government food agencies and Codex panels. The newly formed World Public Health Nutrition Association can play a part here.
- Get committed to thinking of food systems as a whole, shaped as they are by environmental, technological, social, political and economic factors, which can be identified, analysed, changed or protected.
- Get engaged with relevant policy makers and decision takers outside the profession, including multinational bodies, national governments, civil society organisations, primary food producers, ethical food and drink industries, and with colleagues inside and outside the health professions.

Mark Lawrence Food Policy Unit WHO Collaborating Centre for Obesity Prevention Deakin University Melbourne, Australia Email: lawrence@deakin.edu.au

### References

 Rosen G (1993) A History of Public Health, expanded edition. Baltimore, MD: The Johns Hopkins University Press.  World Health Organization (2004) Global Strategy on Diet, Physical Activity and Health. http://www.who.int/ dietphysicalactivity/strategy/eb11344/strategy\_english\_web. pdf (accessed July 2009).

- Tillotson JE (2004) America's obesity: conflicting public policies, industrial economic development, and unintended human consequences. Annu Rev Nutr 24, 617–643.
- Food and Agriculture Organization of the United Nations & World Health Organization (2008) Joint FAO/WHO Food Standards Programme. Codex Alimentarius Commission, Procedural Manual, 18th edition. ftp://ftp.fao.org/codex/ Publications/ProcManuals/Manual\_18e.pdf (accessed July 2009)
- Chan M (2009) Focus on health is the key to welfare of humanity. Address at the Economic and Social Council 2009 High-level Segment, Geneva, Switzerland, 6 July. http:// www.who.int/dg/speeches/2009/health\_focus\_20090706/en/ index.html (accessed August 2009).
- Anand P & Gray A (2009) Obesity as market failure: could a 'deliberative economy' overcome the problems of paternalism? Kyklos 62, 182–190.
- Moodie R, Swinburn B, Richardson J & Somaini B (2006) Childhood obesity – a sign of commercial success, but a market failure. *Int J Pediatr Obes* 1, 133–138.
- Food and Agriculture Organization of the United Nations & World Health Organization (2009) Joint FAO/WHO Food Standards Programme. Codex Alimentarius Commission, Thirty-second Session, Rome, Italy, 30 June–4 July 2009. Report of the Twenty-fifth Session of the Codex Committee on General Principles, Paris, France, 30 March–3 April 2009. ALINORM 09/32/33. ftp://ftp.fao.org/codex/Alinorm09/ al32\_33e.pdf (accessed August 2009).
- Food and Agriculture Organization of the United Nations & World Health Organization (2009) Joint FAO/WHO Food Standards Programme. Codex Alimentarius Commission, Thirty-second Session, Rome, Italy, 30 June–4 July 2009. Report of the 30th Session of the Codex Committee on Nutrition and Foods for Special Dietary Uses, Cape Town, South Africa, 3–7 November 2008. ALINORM 09/32/26. ftp://ftp.fao.org/codex/Alinorm09/al32\_26e.pdf (accessed August 2009).
- 10. Food and Agriculture Organization of the United Nations & World Health Organization (2009) Joint FAO/WHO Food Standards Programme. Codex Alimentarius Commission, Codex Committee on Food Labelling, Thirty-seventh session, Calgary, Canada, May 4–8, 2009. Preliminary report from the electronic working group on discussion paper on labelling provisions dealing with the food ingredients identified in the Global Strategy on Diet, Physical Activity and Health. CX/FL 09/37/7-CRD.1. Rome: FAO.