

GLOBALIZATION FOR HEALTH

Trade liberalization and the diet transition: a public health response

GEOF RAYNER¹, CORINNA HAWKES², TIM LANG¹ and WALDEN BELLO^{3,4}

¹City University, London, UK, ²International Food Policy Research Institute, Washington DC, USA, ³Department of Sociology and ⁴Department of Public Administration, Focus on the Global South, University of the Philippines, Philippines

SUMMARY

Trade liberalization remains at the forefront of debates around globalization, particularly around the impact on agriculture and food. These debates, which often focus on how poorer countries can 'trade their way' out of poverty, pay limited attention to dietary health, especially in the light of the WHO's Global Strategy for Diet, Physical Activity and Health (2004), which warned that future health burdens will be increasingly determined by diet-related chronic diseases. This article examines the diet transition as the absent factor within debates on liberalizing trade and commerce. We describe the

evolution of trade agreements, noting those relevant to food. We review the association between trade liberalization and changes in the global dietary and disease profile. We illustrate some of the complex linkages between trade liberalization and the 'diet transition', illustrated by factors such as foreign direct investment, supermarketization and cultural change. Finally, we offer three scenarios for change, suggesting the need for more effective 'food governance' and engagement by public health advocates in policy making in the food and agriculture arena.

Key words: globalization; trade; food; non-communicable diseases

WORLD TRADE POLICY, AGRICULTURE AND FOOD

Over the last half-century, the volume of merchandize traded globally increased 17-fold, more than three times faster than the growth in world economic output (FAO, 2003). Agricultural trade has grown at around the same rate as world economic output, but accounts for <10% of world merchandize exports. The World Food Summit in 1996 made the case that international food trade permits consumption to exceed production and helps modulate fluctuations in supply, but it was also noted that trade competition might disrupt traditional food production systems or introduce negative environmental consequences.

Since 1994, world trade policy has been managed by the World Trade Organization (WTO), a supranational body dedicated to liberalizing (i.e. opening up) commercial interactions between nations. Member states of the WTO negotiate trade deals in a series of 'Rounds', addressing trade issues such as protectionist mechanisms (tariff and non-tariff barriers), subsidies, intellectual property, foreign direct investment (FDI), food safety and other matters once solely the province of nation states or international trade groupings. Trade policy should not be understood as simply the movement of goods across borders, but the rules affecting commerce in the broadest terms.

Until 1994, trade policy was subsumed by the loose trade 'club' of member nations known as

the General Agreement on Tariffs and Trade (GATT). The final GATT Round, the Uruguay Round (1987–1994), established the WTO and brought agriculture and food into the negotiations, leading to the Agreement on Agriculture (AoA).

As a result of the GATT, the average tariff on non-agricultural goods fell from ~40% in 1947 to 4.7% by the end of the Uruguay Round in 1993. When the WTO assumed its responsibilities, agricultural liberalization was high on its agenda. Agricultural trade has indeed increased since the AoA: total world trade in agriculture had risen to US\$674 billion by 2003 (WTO, 2004). But, protectionism has actually also risen in both percentage and volume terms: in OECD countries, producers' support had reached US\$279 billion by 2004 (OECD, 2005). Some have argued that this level of subsidy represents dumping on a global and systematic scale (Anderson *et al.*, 2001), explaining the decline of food exports from developing countries from ~50% of total world exports in the 1960s to <7% by 2000 (FAO, 2005).

Addressing agricultural protectionism remains prominent on the WTO agenda. The Doha Round of negotiations aimed to promote 'substantial improvements in market access' (http://www.wto.org/english/tratop_e/dda_e/dda_e.htm). Negotiations, however, have proved painfully difficult (the 1999 talks held in Seattle collapsed, as did the Cancun talks in 2003). The recent Hong Kong talks, in December 2005, became mired in complexity, although there was agreement to eliminate export subsidies by 2013.

Food trade is affected by numerous other trade agreements. The WTO Agreement on Technical Barriers to Trade (TBT) applies to food quality standards and labelling (e.g. of nutrients) and the Trade-Related Intellectual Property Rights Agreement (TRIPS) to seed patents. The agreement on the application of Sanitary and Phytosanitary Measures (SPS) has been notably important in food trade, applying to any trade-related measure taken to protect human health from unsafe food. SPS recognizes the standards set by another important trade-related text: the Codex Alimentarius (the joint WHO/FAO international food code). Reflecting the emphasis placed on food safety, SPS notifications to the WTO increased from 196 in 1995 to 855 in 2003 (Regmi *et al.*, 2005). Diet and nutrition have received negligible attention.

Trade policy is also set through 'regional trade agreements' (RTAs). In the last decade, almost 200 RTAs have been notified to the WTO. RTAs, along with 'bilateral agreements', such as the recent US–Australia Free Trade Agreement and the new Central American Free Trade Agreement (CAFTA), are becoming critically important in the face of tensions at the WTO.

TRADE POLICY AND PUBLIC HEALTH

The assumption behind trade liberalization is that open markets benefit everyone, everywhere, by inducing a virtuous cycle of economic growth. Increased trade lowers prices for consumer goods (notably food, which makes up a relatively larger proportion of the expenditures of poor people), boosts incomes of agricultural producers (comprising large segments of the populations of low-income countries) and increases relative demand for skilled labour, which, in turn, raises demand for education and public goods. It has been suggested that 40% of differential mortality improvements among countries are explained by differences in national income growth; consequently, an income rise of by just 1% in developing countries would avert as many 33 000 infant and 53 000 annual child deaths (Pritchett and Summers, 1996). From this perspective, trade liberalization is 'good for the poor' and 'good for health' (Dollar and Kraay, 2002), and although growth may increase inequality, this is outweighed by positive implications (Ravallion, 2004).

Such suggestions, say critics, have often not been borne out in reality. If some say that insufficient liberalization is to blame, others allege that trade rules favour the powerful and that policy needs to be 'pro-poor' (Oxfam, 2002). According to a former chief economist at the World Bank, the new trade rules, the adjudication process on the rules and the required domestic disciplines reflect the priorities and needs of developed countries more than developing countries (Stiglitz and Andrews, 2004). Even organizations required to promote trade in food have questioned liberalization formula, saying that trade liberalization confuses mechanisms with outcomes. The UN Food and Agriculture Organization of the United Nations (FAO) says that globalization 'does not automatically

benefit the poor' (FAO, 2000) and that market openness should not be viewed as a policy tool to achieve growth but primarily as an economic outcome. (FAO, 2003) Liberalization may prompt reductions in state expenditure in public goods, such as education or health services, which benefit the poor most (Conway, 2004). Population health may worsen if general working conditions deteriorate or if trade facilitates the transfer of disease or unhealthy consumer goods across borders. Some contest that health and social justice would be better achieved through 'deglobalization' or 'localization' (Hines, 2000; Pretty and Hine, 2001; Bello, 2004).

Amartya Sen has observed that debates around globalization often take the form of an empirical dispute about whether the poor who participate in trade are getting richer or poorer. A more fundamental question, he suggests, turns on the distribution of its benefits, which, in turn, raises broader issues about the adequacy of the institutional arrangements that shape global and national economic and social relations (Sen, 2002). Trade and trade agreements for the global food supply chain also have unequal consequences. Given that trade policy is becoming an important driver for the global food supply, national dietary patterns should not be judged by consumption volume alone but much by broader dietary and nutrition considerations, thereby raising the importance of 'food governance'—the scrutiny of the food chain to achieve public benefit.

In 2002, the WHO and WTO prepared a joint report on the public health implications of trade (WHO/WTO, 2002). This noted that trade agreements do take some account of health, permitting national trade-restrictive measures that protect human health—but only those that are the least trade-restrictive relative to any other measure. The report concluded that 'there is common ground between health and trade' (p. 137), but in the face of past disputes between health and trade, it also argued for health and trade policy 'coherence'. Although the report covered matters as diverse as intellectual property rights, food insecurity, infectious disease control and food safety, it failed to address changing diets and the rising global burden of diet-related chronic diseases (DR-CDs).

However, according to WHO Technical Report 916, international trade issues 'need to

be considered in the context of improving diets' (WHO/FAO, 2003, p. 140). Certainly, trade policy proved to be one of the most contentious issues during the negotiation of the WHO's Global Strategy on Diet, Physical Activity and Health, suggesting the need for a closer look at trade.

DIET-RELATED CHRONIC DISEASES

Hitherto, public health concerns around food have focused on undernutrition and food safety. Undernutrition decreased from 28% of the global population in the 1980s to 17% in 1999–2001. The subsidies going to agriculture in OECD countries, given rising productivity, have meant that although the world's population doubled between 1960 and 2000, levels of nutrition improved markedly and the prices of rice, wheat and maize—the world's major food staples—fell by 60%. Nevertheless, FAO estimates that more than 800 million people suffer chronic undernutrition. Alongside, food safety issues remain prominent because of bovine spongiform encephalopathy (BSE) and Avian Influenza. Chronic diseases, in contrast, are influenced by factors urbanization and changing food such as systems. As a result, there is an emerging 'dual burden': continuing malnutrition on one side and rising DR-CDs on the other.

The global burden of DR-CDs, such as obesity, diabetes, cardiovascular diseases, cancer, dental diseases and osteoporosis, is rising (WHO/FAO, 2003). Chronic diseases account for 60% of the 56 million deaths globally, with unhealthy diets being a major contributor to key risk factors (high blood pressure, high cholesterol, low fruit and vegetable intake and overweight and obesity) (WHO, 2002). Over one billion people are now overweight or obese. If the health costs in USA and EU are already massive (Rayner and Rayner, 2003), such diseases would overwhelm poorly resourced healthcare systems.

Omran's theory of the Epidemiological Transition, first promulgated 35 years ago, proposed that as societies develop, chronic diseases substitute for infectious diseases (Omran, 1971). More recently, Popkin has characterized a 'nutrition transition', focusing on diet, nutrition and lifestyle determinants in the explanation of the emergence of DR-CDs (Popkin, 2001). The nutrition transition is conceptually powerful,

but in explaining obesity, for example, it is only one of a number of models—ranging from economic change to genetic factors (Lang and Rayner, 2005). There may be a case for ‘unbundling’ the nutrition transition from one single process into three, namely, diet, the physical environment and culture, recognizing that each of these transitions overlap, combine and amplify each to the other. Separation may help clarify each conceptual space and strengthen policy responses. The rest of this paper deals with the diet transition.

TRADE LIBERALIZATION AND THE DIET TRANSITION

Dietary change is occurring worldwide: traditional diets with a limited range of staples are being substituted by a diet more composed of livestock products (meat, milk and eggs), vegetable oils and sugar. These three food groups currently provide 28% of total food consumption in the developing countries (in terms of calories), up from 20% in the mid-1960s. Their share is projected to rise to 32% in 2015 (FAO, 2003).

Global trade patterns are immensely complex. Trade policy acts at the macrolevel, affecting households and individuals through complex and poorly understood pathways with potential for unpredictable and unintended effects. There is, moreover, enormous variation in the pace and style of dietary change worldwide. It is thus difficult to trace the precise links between trade and diet, just as it is for globalization’s impact on health (Hawkes, 2006). Still, considering the potential importance of trade for dietary health, a starting point is to understand how trade liberalization affects the food supply chain, what this implies for diet and the critical needs for future work in this area.

TRADE LIBERALIZATION AND THE FOOD SUPPLY CHAIN

Trade liberalization affects the food chain at varying levels of complexity that can be characterized as follows: food imports and exports, the local/global balance of the internal dynamics of the food supply chain, FDI in food processing and retail and commercial promotion of food.

The most obvious consequence is the rising importance of food imports. For the 49 least developed countries by the end of the 1990s, imports were more than twice as high as exports. The role of food imports in the Pacific Islands States presents an historical example of potential dietary impacts. Pre-1945, each nation was essentially self-sufficient, but during the subsequent era of ‘development’, countries became more reliant on imports, with impact on diets and local production systems. In Tonga, for example, meat imports rose from 3389 tonnes in 1989 to 5559 tonnes in 1999, accompanied by a 60% increase in consumption (Evans *et al.*, 2001). Given the highly differentiated impact of trade at a country level, there is an urgent requirement to undertake health impact analysis at national or regional levels in order to unravel this complex trade picture.

Another level of added complexity is the effect of trade liberalization on the internal dynamics of the food supply chain. Although local factors remain critical, changes in the food chain are taking on an increasingly uniform character. In traditional societies, food chains are typically short and focused on locally grown, seasonally available products. As elements of the food chain rise in capital intensity, the task of moving food from farm to table becomes more complex. Localism is displaced, and investments increasingly shifted from basic or seasonal commodities to ‘value added’ processed foods. Such circumstances are frequently driven by new market players attracted by more open market conditions. From a public health perspective, there is a need to examine the circumstances under which trade liberalization encourages or discourages local production and if this has a dietary impact.

Another layer of complexity is investment. Liberalization of finance is part of trade regulations and encourages FDI. FDI has proved particularly important in the spread of highly processed foods (Hawkes, 2005). Cross-border processed food trade has remained limited since the mid-1990s (Regmi *et al.*, 2005), whereas FDI has mushroomed. Between 1988 and 1997, food industry FDI increased from US\$743 million to US\$2.1 billion in Asia and from US\$222 million to US\$3.3 billion in Latin America, far outstripping investments in agriculture (FAO, 2004). US food companies sell five times more (US\$150 billion) through FDI sales than through export sales. FDI has stimulated the global spread of

supermarkets, driving sales of packaged foods. The USA has the highest concentration of supermarkets (Table 1), but the largest shopping malls are now in China (Barboza, 2005). It is often assumed that the retail revolution in processed 'convenience' foods delivers dietary gains by widening the choice of foods and lowering price, but the actual impact of these changes requires closer assessment.

A further level of complexity is the role of commerce in changing the cultural expectations of populations via advertising and product marketing. The case of soft drinks illustrates the role of a more liberal operating environment (Bolling, 2002). FDI sales for US soft drink brands were US\$30 billion in 1999 in a global market estimated at US\$393 billion (whereas US soft drink exports were only US\$232 million in 2001). Soft drinks use cheap constituents that are mostly acquired locally with only the critical ingredients are imported. In order to achieve market dominance, foreign brands require large investments in production, distribution and promotional marketing: Coca Cola and PepsiCo spent, respectively, US\$2.2 billion and US\$1.7 billion on advertising and other forms of promotion in 2004 (more than the WHO's annual budget). The successful marketing of soft drinks and similar products is affected by the global spread of advertising services, which have been bolstered by more liberal trade rules, and has played a significant part in reshaping cultural expectations. However, this marketing effort has not necessarily internalized the costs to health.

FUTURE SCENARIOS FOR TRADE AND DIETARY HEALTH

In nineteenth century Europe, nutrition was a powerful driver for economic growth (Fogel, 1977). In the twenty-first century, global dietary change may be of equal importance. What is the future for trade policy and dietary health? Trade policy used to be dominated by farm and commodity groups. Protectionism remains strong, but the balance of power has shifted towards food processing, retail industries and traders. Despite growing complexity in trade rules, greater liberalization remains likely, although at an uneven pace. From these trends, we discern three possible scenarios on the relationship between food trade and dietary health.

Business as usual. Further development of global and national markets drawing on globalized technology, supermarketization and consumer dietary patterns, but retaining a semblance of regional and national variations in dietary composition. This represents what will happen in the absence of a public health or food industry response to concerns about unhealthy diets.

Fragmentation. Development of processed 'niche' food products designed to appeal to the healthy diet conscious, heavily packaged and advertised, but with limited implications for the rest of the food chain. Stung by the obesity crisis worldwide, some international food companies are already pursuing this scenario, hoping to highlight their products' health benefits.

Table 1: Share of food sales for retailers in selected international markets, 2002 (per cent sales)

Retail outlets	United States	Western Europe	Latin America	Japan	Indonesia	Africa and Middle East	World
Supermarkets/hypermarkets	62.1	55.9	47.7	58.0	29.2	36.5	52.4
Independent food stores	10.0	10.0	33.0	11.3	51.1	27.1	17.8
Convenience stores	7.5	3.8	3.1	18.3	4.8	10.0	7.5
Standard convenience stores	5.7	2.5	1.8	18.2	4.8	9.5	6.4
Petrol/gas/service stations	1.8	1.2	1.3	0.1	0.0	0.5	1.1
Confectionery specialists	0.5	2.0	1.7	0.3	0.1	1.3	1.2
Internet sales	0.2	0.1	0.1	0.4	0.0	0.0	0.2
Chemists/drug stores	0.2	0.3	0.2	0.4	0.2	0.3	0.3
Home delivery	0.4	0.2	0.0	0.0	0.0	0.0	0.1
Discounters	7.4	10.3	0.2	2.2	2.7	6.2	5.7
Other	12.0	17.5	14.0	9.0	11.9	18.6	14.9
Total	100	100	100	100	100	100	100

Source: Euromonitor, 2003 <http://www.euromonitor.com>.

Health at the centre of trade. Resulting from a strong public health response to dietary concerns, dietary health becomes a key arbiter of food and farming, including trade, with food governance a determining factor. This outcome—an ‘ecological public health’ approach applied to food and farming—implicates other drivers of change, such as water shortages and climate change.

The first two scenarios are more likely in the short term, but, as health consequences accumulate, attention may be given to the third. How this third scenario might develop is now explored.

PROMOTING GOOD GOVERNANCE

In increasingly obesogenic societies, encouraging people to adopt healthier lifestyles—the ‘social marketing’ approach (Grier and Bryant, 2005)—is unlikely to work without tackling major upstream forces such as trade. Moving to the third scenario requires a far stronger incorporation of dietary health considerations into trade policy. The public health community would need to take a stronger advocacy role to achieve better oversight on the food chain. Measures might address both the supply and the demand sides, for example, affecting relative prices of healthy and less healthy foods (Haddad, 2003). Lessons could be learnt from attempts to inject sustainability and environmental protection into business activity.

More specifically, we propose a spectrum of actions to address trade-related diet issues, as follows:

- *Strengthen food and health governance.* A central issue is the effectiveness of institutional frameworks for control and monitoring of the food chain from a nutritional balance perspective, alongside food safety, already the major focus of international and national food governance. Globally, the Codex Alimentarius Commission is now beginning to discuss the implementation of the WHO Global Strategy on Diet, Physical Activity and Health. Ministries of health, education and others, particularly in North America and Europe, are beginning to take a far closer interest in food in institutional settings, and one audit of companies’ health commitments suggests that this approach is

rich in possibilities for improving food governance (Lang *et al.*, 2006).

- *Audit commerce and trade on national diet.* Auditing the impact of trade liberalization on diets is under-researched. Pending further research, some have argued for freezing compliance with liberalization commitments under trade agreements. Monitoring of food industry and agribusiness responses to trade agreements—mergers across borders, growth and marketing trends and efforts to move to a healthier product mix—would be one example. This is also of interest to investment banks, with their concerns about the long run sustainability of the food sector (JPMorgan, 2003).
- *Engage with trade and international agreements to promote good dietary health.* Trade institutions assume that liberalization automatically generates health benefits and note that WTO agreements already have a ‘pro-health’ clause. However, food is considered only in terms of food safety—irrespective of nutrition. The Framework Convention on Tobacco Control (FCTC) provides some lessons of developing a non-trade treaty that sets a pro-health standard in trade disputes (the FCTC does not specifically refer to trade, but uses language indicating that health should be the prime consideration). The convention contained potentially commerce-restrictive consumer-oriented strategies, including taxes, labelling, advertising, product liability and financing. Food is not tobacco, but the impact of DR-CDs may warrant comparable scrutiny. On product marketing, for example, actions might range from advertising bans to making schools commerce-free (Hawkes, 2004). Such regulations have trade implications, so public health professionals must engage with trade policy professionals to influence any potential adjudication process.
- *Develop national supply side measures to build new markets for healthy foods.* FDI is driving changes in food chain ownership and diet. A way to maintain local patterns of ownership is to encourage cooperatives linking suppliers, retailers and consumers allied with pressure on local government to address employment losses. Building markets for healthy foods could be a focus for cooperatives, while also benefiting local economies.
- *Working with Civil Society.* Civil society activism ranges from consumers wanting low

prices and quality produce to communities defending livelihoods against multinational enterprise (Focus on the Global South, 2003). Nutrition and health professionals can engage with these varied strands and those most affected by trade policies.

- *Public health capacity.* Filling capacity gaps is a necessary precursor to action. The foregoing proposals have little hope of success without the public health community acquiring new expertise, resources and, critically, imagination and political will, to make successful interventions. In many countries, the public health infrastructure—professions, facilities, influence and power—remains weak. Industrial levies or hypothecated taxation, or potentially through marketing taxes or taxes on energy-dense foods, offer potential means of rising finance.

CONCLUSION

Putting good health at the centre of trade policy will require public health advocates to re-think strategies. The impact of liberalizing trade policy on diet is complex, under-researched and poorly understood. Although the World Food Summit in 1996 made a strong case for the advantages of expanding global food trade, it also warned of possible negative consequences. Public health bodies need to improve their monitoring of what the food sector delivers and how it markets products, particularly those foods identified in the Global Strategy for Diet, Physical Activity and Health. Departments of Commerce and Trade ought to have better public health input into their policy making. *Vice versa*, Ministries of Health and the public health movement need to gain a more sophisticated analysis of trade and investment in order to promote the development of healthy diets.

Address for correspondence:

Geof Rayner
City University
London
UK
E-mail: email@rayner.uk.com

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