

Editorial

Where does your food come from?

Linking agricultural and nutrition policy

In this issue we are pleased to have a contribution that delivers a thoughtful commentary on the disconnection between US agricultural and nutrition policy⁽¹⁾. In his commentary, Professor Griffin, Director of the Agriculture, Food and Environment Program at Tufts University, describes the context from which current agricultural and nutrition policies emerged and the circumstances that now place them at odds with each other. He also discusses how the linkage between agricultural and nutrition policies might be strengthened at the local, regional and national levels. As Professor Griffin emphasizes, there is currently no meaningful linkage between agricultural and nutrition policy in the USA, but the means to improve this linkage are available. His examples of existing and possible linkages at the local, regional and national levels are based in a unique familiarity with both agriculture and policy environments in the USA, and are worth further discussion. Ultimately, agricultural policy governing food sources and nutrition policy guiding food consumption should not be at odds, and ideally we should all be able to receive a satisfactory answer to the question, ‘Where does your food come from?’

Where does our food come from? The case of fish

Often, the answer to that question is not a happy one, and recommendations on how to deal with it are contradictory. In waterways, atmospheric deposition of mercury emitted from the combustion of fossil fuels, particularly coal-fired power plants, has led to widespread mercury contamination of fish in some areas^(2,3). At the same time, interest in the potential health benefits from consuming fish and fish oils is increasing. The American Heart Association, for example, recommends at least two servings of fish each week⁽⁴⁾. How do consumers balance discordant messages about the risks and benefits of eating fish?

In an analysis of US news media stories about fish from 1993 to 2007, Greiner *et al.*⁽⁵⁾ found that messages conveying risk outweighed messages conveying health benefits by four to one, with most stories focusing on mercury contamination in fish. As a result, messages regarding potential health benefits of fish consumption may be largely lost to consumers, who mostly receive messages emphasizing potential risks of fish consumption. The authors suggest that public health practitioners should work with news media to deliver clear messages about which fish can be recommended and which should

be avoided. Lists of which fish are okay to eat and which are not (in terms of contaminants as well as sustainability) are available (e.g. see references (6) to (8)), but creating simple messages out of long lists will be an ongoing challenge.

Assessing food environments

Other articles in this issue address neighbourhood food environments. In their review of the literature on GIS (Geographic Information Systems) methods used to quantify spatial accessibility of food outlets, Charreire *et al.*⁽⁹⁾ identified two primary concepts used to assess the food environment: (i) density, or the number of food outlets in a given area; and (ii) proximity, or the distance to a given food outlet. Laska *et al.*⁽¹⁰⁾ use both spatial methods – density and proximity – to show associations of the availability and proximity of food outlets around adolescents’ homes in the Minneapolis/St. Paul metropolitan region, USA, with consumption of sugar-sweetened beverages.

Charreire *et al.*⁽⁹⁾ also suggest that studies on accessibility of food outlets should examine not only spatial accessibility but also other such dimensions of accessibility as affordability and the availability of foods within stores. Also in this issue, Gloria *et al.*⁽¹¹⁾ describe a tool, adapted from the Nutrition Environment Measures Survey in Stores (NEMS-S), to measure the availability of healthy foods from grocery and convenience stores in Texas. Their tool demonstrates generally high inter-rater and test–retest reliability, and further provides preliminary evidence that grocery (but not convenience) stores in high-income neighbourhoods offer more healthy foods than those in low-income neighbourhoods.

While representing different aspects of ‘environment,’ what these articles and the commentary have in common is recognition of the interactions between people and their environment. The environment, whether local or global, offers the selection of foods from which to choose and hence determines what we can eat, in ways that can be positive (e.g. fresh, pesticide-free fruits) or negative (e.g. sugar-sweetened beverages in school vending machines). We, in turn, act on preferences and principles (e.g. choosing to buy only organic produce, or lobbying for food safety legislation), and our actions determine the quality of our food environment – also in ways that can be positive or negative. It is hoped that the effects of our actions on our environment can turn more towards the positive with sustained effort. The question of where our

food comes from may then be answered more easily, giving consumers a greater freedom of personal choice.

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References

1. Griffin T (2010) Commentary: Linking agriculture and nutrition. *Public Health Nutr* **13**, 1941–1944.
2. Pacyna EG, Pacyna JM, Steenhuisen F *et al.* (2006) Global anthropogenic mercury emission inventory for 2000. *Atmos Environ* **40**, 4048–4063; available at doi:10.1016/j.atmosenv.2006.03.041.
3. Scudder BC, Chasar LC, Wentz DA *et al.* (2009) *Mercury in Fish, Bed Sediment, and Water from Streams across the United States, 1998–2005. Scientific Investigations Report* no. 2009–5109. Reston, VA: US Geological Survey.
4. American Heart Association (2010) Nutrition Center. Healthy Diet Goals. http://www.heart.org/HEARTORG/GettingHealthy/NutritionCenter/HealthyDietGoals/HealthyDiet-Goals_UCM_310436_SubHomePage.jsp (accessed September 2010).
5. Greiner A, Clegg Smith K & Guallar E (2010) Something fishy? News media presentation of complex health issues related to fish consumption guidelines. *Public Health Nutr* **13**, 1786–1794.
6. Environmental Defense Fund (2010) Seafood Selector. Make Smart Choices When Eating Seafood. <http://www.edf.org/page.cfm?tagID=1521> (accessed September 2010).
7. Monterey Bay Aquarium (2010) Seafood WATCH. <http://www.montereybayaquarium.org/cr/seafoodwatch.aspx> (accessed September 2010).
8. Marine Conservation Society (2010) FISHONLINE website. <http://www.fishonline.org/> (accessed September 2010).
9. Charreire H, Casey R, Salze P *et al.* (2010) Measuring the food environment using geographical information systems: a methodological review. *Public Health Nutr* **13**, 1773–1785.
10. Laska MN, Hearst MO, Forsyth A *et al.* (2010) Neighbourhood food environments: are they associated with adolescent dietary intake, food purchases and weight status? *Public Health Nutr* **13**, 1757–1763.
11. Gloria CT & Steinhardt MA (2010) Texas nutrition environment assessment of retail food stores (TxNEA-S): development and evaluation. *Public Health Nutr* **13**, 1764–1772.