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## Cities, sustainability and health – part 2

# Healthy, just and eco-sensitive cities: moving forward

**GUEST EDITORS**

*Jane M. Dixon*[A,C] *and Anthony G. Capon*[A,B]

[A]*National Centre for Epidemiology and Population Health, The Australian National University*
[B]*Australian Health Policy Institute, The University of Sydney*
[C]*Corresponding author. Email: jane.dixon@anu.edu.au*

> *…there should be more equality in the use of cities, and in the distribution of costs and benefits to their people*.[1]

A quarter of a century ago, historian Hugh Stretton[1] put forward an 'impressionistic' treatise – *Ideas for Australian cities* – that foreshadowed a major issue confronting today's urban planners, health planners, ecologists and social geographers: what values underpin alternative ways of city living? How this question is answered, he said, would illuminate the practical efforts needed to address the gulf in living conditions between rich and poor.

An important recent academic development has been the systematic incorporation of an equity perspective into urban health analyses.[2–5] These studies reveal how particular urban configurations generate not only a substantial burden of disease but an unjust patterning of disease.

Inspired by Stephen Boyden's ecological approach to understanding urban settlements,[6] the first special issue on this topic in the *NSW Public Health Bulletin* (Vol. 18, Issue 3–4) provided a series of frameworks laying out the health challenges posed by postindustrial cities. This issue builds on that perspective, with contributors exploring the systems thinking, urban planning, research and governance approaches that are needed to achieve Stretton and Boyden's shared vision of a more equitable distribution of the costs and benefits of city living.

## The papers in this issue

Beginning from the premise that the obesity epidemic is an effect of a complex ecological system, Newell and col-
leagues first provide an introduction to systems thinking and then apply this to an analysis of obesity in our society. Their examples highlight how policy makers concerned with obesity are required to operate outside their immediate portfolios and to work together on the interplay between the characteristics of human populations and the localities in which they live.

Strazdins and Loughrey make a strong plea to consider time as a system variable that contributes to population health and environmental problems and solutions. As Strazdins argued at the 2006 Fenner Conference, *Urbanism, Environment & Health*, if urban designs increase time demands, they are likely to have unanticipated health costs, disadvantaging those in the community who are busiest.[7]

Berry argues for more research on the urban system's unforseen impacts on mental health. Like Raphael and Wooding,[8] Berry concludes that we do not know which urban configurations contain greater mental and emotional stresses. She proposes an original schema for examining urban living and mental health relationships, providing a useful template for organising future research.

The three papers that follow offer different examples of urban design approaches that have the potential to improve the physical and mental health of city inhabitants. Carlisle for the National Heart Foundation of Australia (Victorian Division) describes *Healthy by Design*, the result of collaboration between the National Heart Foundation and various stakeholders representing the planning, recreation, health,

transport and community building sectors. The tool aims to arrest the 'activity transition' (diminished activity levels) underway in modern societies, which is caused in part by car use and sedentary leisure pursuits.[9]

Cozens addresses an issue raised by Berry and others[10] regarding the relationship between poor mental health and physical and social incivilities, which include derelict housing, graffiti, vandalism and fear of crime. Cozens describes Western Australia's Crime Prevention Through Environmental Design framework. He suggests that Crime Prevention Through Environmental Design has the potential to enhance urban sustainability because it encourages holistic thinking about the likely impacts of the built environment on personal safety and security, and public well-being.

Giles-Corti and colleagues describe an ambitious, prospective evaluation for another planning tool adopted by the Western Australian government. Like *Healthy by Design*, the *Liveable Neighbourhood Community Design Code* focuses on physical activity. The evaluation's multi-level, multi-variable and longitudinal nature is entirely sympathetic with the systems perspective advocated by other contributors.

## Urban design and urban nutrition

In his keynote address at the 2006 Fenner Conference, Larry Frank provided evidence that the built environment is an important predictor of physical activity.[11] Much of the discussion at the conference was focussed on urban design interventions to address the physical activity transition.

We would commend urban design approaches that also address the urban 'nutrition transition' (diets high in meat and fats, as well as sugar and refined carbohydrates, and low in vegetables and legumes). There are numerous reasons for this dietary transition,[12–14] including the symbiotic relationship between an industrialised food supply and the way urban living is associated with occupational patterns less compatible with home food production and consumption.

Not only is population health compromised by an industrial food system, so is the biophysical environment. Traditionally, cities have been the launching pad for the nutrition transition because they contain large numbers of affluent consumers. Cities that are highly dependent on food from outside their region or country are imposing a greater ecological footprint than those that are relatively self-sufficient in food. In part, this is due to the high water and feed input requirements of, and greenhouse emissions incurred by, the staples of urban diets: red meat and dairy food.[15] In addition, the dominant model of food distribution based on air and road transport systems generates carbon emissions which increase in volume with the distance that foods travel, or their 'food miles'.[16]

It is important to remember that local food systems existed until quite recently. Less than 50 years ago in Australia, large numbers of suburban residents produced vegetables, fruit and eggs in their backyards: the most accessible and affordable food source we know. Delivery vans plied suburban streets with milk, fish and bread, augmenting what was not being home produced. This convenient provisioning strategy was supplemented by walks to the local, suburban strip of shops, which supplied mainly fresh foods sourced from city wholesale markets and local bakeries. As in other countries, Australia's strip shops have mostly disappeared due to the dominance of the supermarket oligopoly,[17] and urban design that has made cars, and not pedestrians, the primary consideration.

Ethnographic evidence suggests that what can be called 'car-centred diets' are becoming more pervasive. They range across a continuum from fast-food snacks to the several-times-a-week consumption of heat-and-serve meals, through to the festive meal based on imported and local ingredients sourced from across-town specialist providores.[18] Moreover, commercial food deliveries are skewed in favour of fast food, with auto-delivered pizza being an easier option than deliveries of fruit and vegetables.[19]

However, a small renaissance is underway in local food production, distribution and shopping possibilities. Most Australian capital cities now have community food gardens attached to public high-rise buildings, schools or local government run allotments. These are readily accessible to nearby residents and offer cheap produce in return for the labour and other inputs from participants. They are the logical replacement to the backyard garden given that many inner and outer suburban dwellings now have little space for cultivation. In addition, farmers' markets and community-supported agriculture schemes allow city people to engage directly with the food producer. As Whitelegg,[20] who recently designed a sustainable food distribution hub for the City of London, has argued, feeding cities in a sustainable and equitable fashion requires the relocalisation of production and distribution.

The human health benefits of a more sustainable food system were recently highlighted in an article on livestock production, climate change and health. If consumers in industrialised countries halved their dietary intakes of red meat, then not only would agriculture's share of greenhouse emissions decline but consumer health would improve through reductions in risk of ischaemic heart disease, obesity and colorectal cancer.[21] There are potential equity dimensions to affluent consumer reductions in red meat, with other consumers perhaps being able to afford this protein source as it becomes cheaper.

While there is little research linking psycho-social conditions (stress and depression) and the nature of the food supply, the idea of gastro-anomie has dominated food sociology for 20 years now.[22] According to Fischler, the concept's progenitor, this condition afflicts societies which lose connection to their agricultural and culinary systems through embracing corporatist food systems.[23] Discontent and anxiety arise when eating is reduced to individual health and nutrients rather than being about shared enjoyment and social cohesion.[24]

Some years ago, Susan Parham argued that town planners could ameliorate conditions like gastro-anomie by designing-in opportunities for conviviality, rather than leaving people's eating experiences to the market and their socio-economic status. She recommended the use of gastronomic maps to plot the relationship of people to their food environment,[25] and for local governments to work with residents to improve access to pleasurable food experiences. More recent studies support her conjecture that access to cafes and fresh food markets are unequally distributed.[26,27] The popularity of farmers' markets and community-supported agriculture schemes, and the demand for organic food growing at 15% annually,[28] reflect a desire by middle classes at least to reclaim some mastery over the food supply.

Sustainable urban agriculture with a health equity focus is high on the agenda for the Western Sydney consortium pursuing the application of Health Impact Assessment as part of the Sydney Metropolitan Strategy. Their inspiration is drawn from initiatives like the Hawkesbury Harvest in Sydney's northwest, which is beginning to demonstrate how sustainable agriculture has the potential to contribute to long-term triple bottom line outcomes.[29,30] See also www.hawkesburyharvest.com.au.

## Conclusion

The emerging evidence about relationships between our urban environments and contemporary health problems presented in these two special issues could usefully inform supplementary decision support tools with a focus on population health. What has been largely neglected are design considerations that support urban agriculture and edible landscapes,[19] locally and regionally centred food distribution systems, ecologically sustainable supply chains for rural products, and enhanced opportunities for consumers to access enjoyable food experiences. A paddock-to-plate refashioning of the urban and agri-food interface would benefit from the National Heart Foundation's *Healthy by Design* approach to physical activity.

We would be well on our way to achieving Stretton and Boyden's ideas for just, healthy and sustainable Australian cities if the suggestions described in this issue for urban research, planning tools and design approaches were adopted.

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