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The Centre for Translational
Research in Public Health

Foodscapes: latest trends and evidence

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@lakenutrition

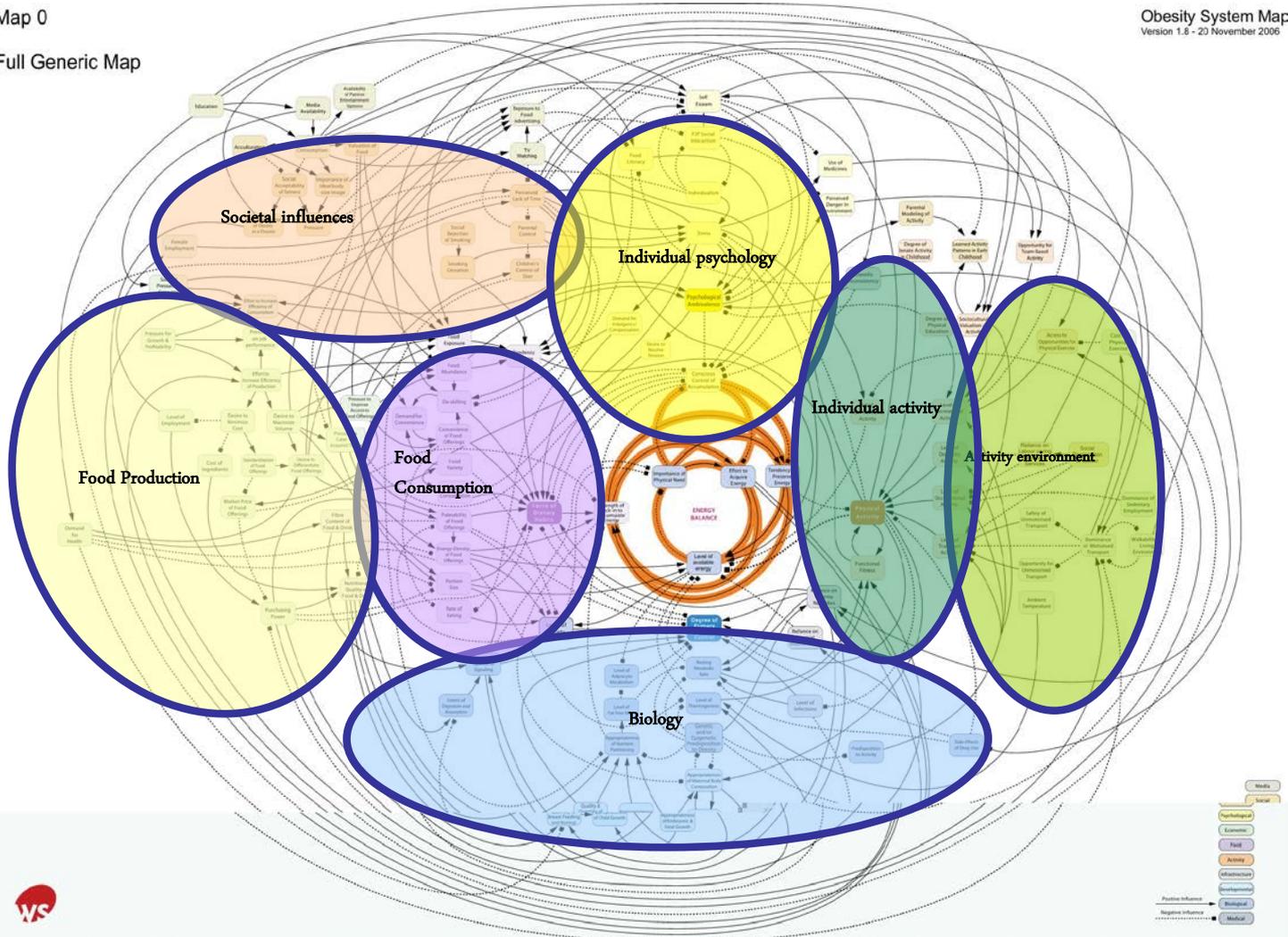
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Diet and Health



BESITY
defusing the health time bomb





The Foodscape

The food environment, or 'foodscape', encompasses any opportunity to obtain food and includes physical, socio-cultural, economic and policy influences at both micro and macro-levels.

Townshend & Lake, 2009; Lake & Townshend, 2006



Food choice and eating behaviours are influenced by a multitude of factors from culture to personal preferences. The relationship between our food choices and the environment in which we make these choices is now widely acknowledged; from nudging and choice architecture to conceptualising how the local food environment influences eating behaviour.



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The Nutrition Society Summer Meeting was held at the Kings College, London on 10–12 July 2017

**Conference on ‘Improving nutrition in metropolitan areas’
Symposium 3: Building a healthier environment**

**Neighbourhood food environments: food choice, foodscapes and planning
for health**

Amelia A Lake^{1,2}

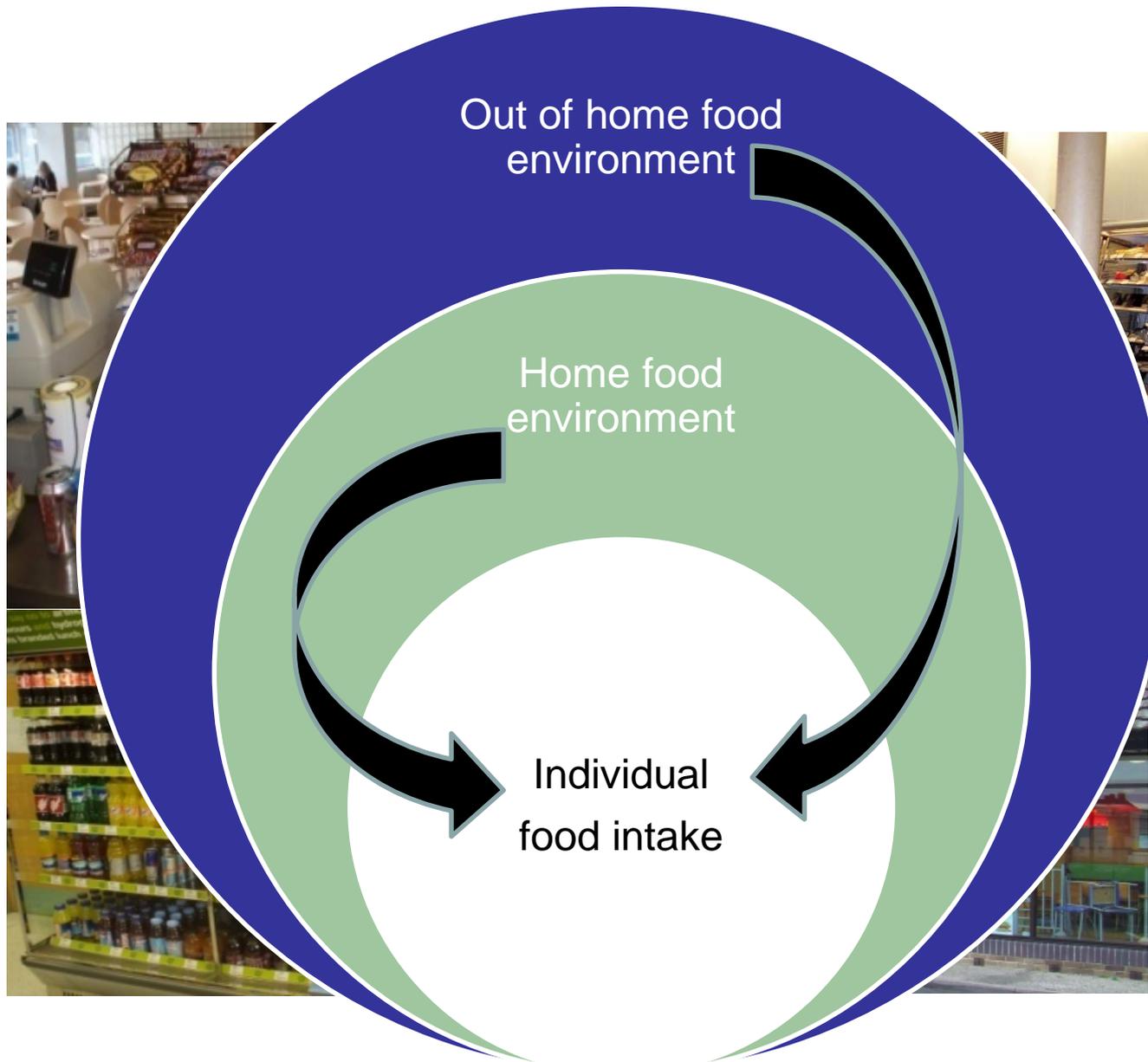
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The simple act of eating, one of the most basic & yet most complex of human behaviours, is determined through a series of policy & governance-driven decisions.



Food choice & the food environment



The context

- Many decisions about food are automatic rather than reflective.
- There is a persistent inclination to overemphasise the importance of internal characteristics such as knowledge, while undervaluing the influence of external factors on human behaviour, which social psychologists term the *fundamental attribution error*
- Education about healthy diets isn't enough to change behaviour.
- Changes in the environmental cues to consumption are needed to change diet.
- External food cues may act on micro and macro levels.

Worldbank: "The complexity of the challenge explains why at an individual level, it is so difficult for people to "just eat less, and move more to lose weight," and why at a macro level, no country has fully succeeded in reversing the obesity trend".

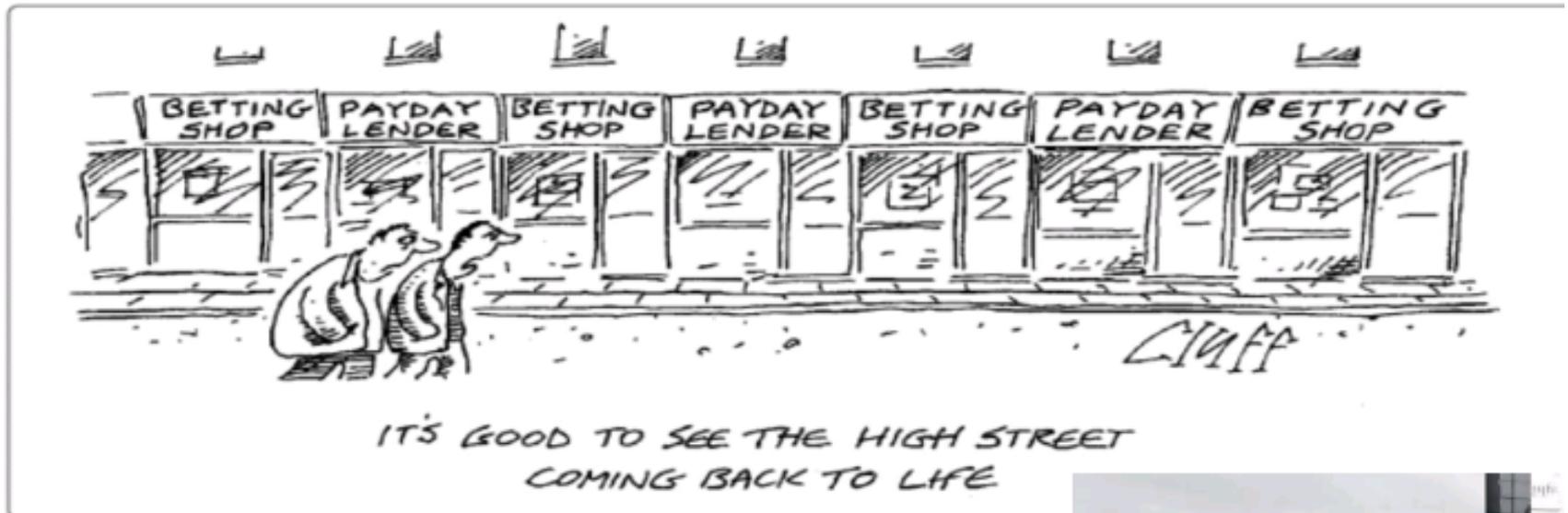
<http://blogs.worldbank.org/health/seeking-agriculture-related-solutions-obesity-increasing-problem-within-malnutrition>



Opinion – 9 April 2014

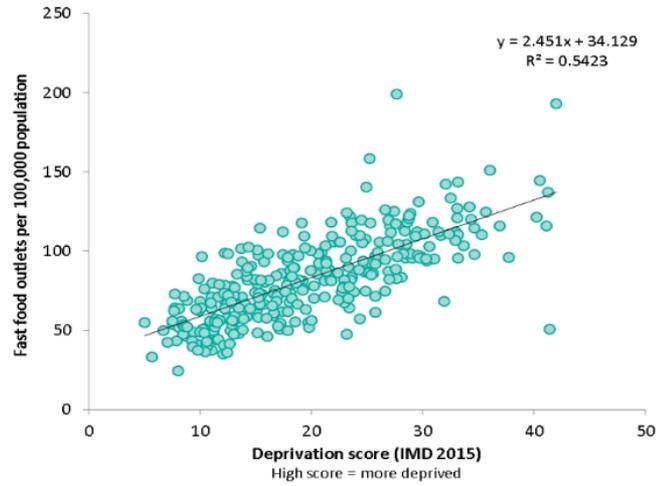
Toxic high streets

Townshend, T.G., 2017. Toxic high streets. *Journal of Urban Design* 22, 167-186.



Relationship between density of fast food outlets and deprivation

by local authority



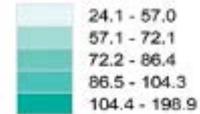
England value
rate per 100,000 population

88

Fast food outlets

by local authority

Rate per 100,000 population





Determinants of takeaway and fast food consumption: a narrative review

Hayley G. Janssen*, Ian G. Davies, Lucinda D. Richardson and Leonard Stevenson

School of Sport Studies, Leisure and Nutrition, Liverpool John Moores University, Barkhill Road, Liverpool, Merseyside L17 6BD, UK

Abstract

Out-of-home foods (takeaway, take-out and fast foods) have become increasingly popular in recent decades and are thought to be a key driver in increasing levels of overweight and obesity due to their unfavourable nutritional content. Individual food choices and eating behaviours are influenced by many interrelated factors which affect the results of nutrition-related public health interventions. While the majority of research based on out-of-home foods comes from Australia, the UK and USA, the same issues (poor dietary habits and increased prevalence of non-communicable disease) are of equal concern for urban centres in developing economies undergoing 'nutrition transition' at a global scale. The present narrative review documents key facets, which may influence out-of-home food consumption, drawn from biological, societal, environmental, demographic and psychological spheres. Literature searches were performed and references from relevant papers were used to find supplementary studies. Findings suggest that the strongest determinants of out-of-home food availability are density of food outlets and deprivation within the built environment; however, the association between socio-economic status and out-of-home food consumption has been challenged. In addition, the biological and psychological drives combined with a culture where overweight and obesity are becoming the norm makes it 'fashionable' to consume out-of-home food. Other factors, including age group, ethnicity and gender demonstrate contrasting effects and a lack of consensus. It is concluded that further consideration of the determinants of out-of-home food consumption within specific populations is crucial to inform the development of targeted interventions to reduce the impact of out-of-home foods on public health.

Key words: Obesity: Dietary intake: Factors influencing consumption: Out-of-home foods

Academic evidence on the relationship between the food environment and health

- Challenging! For a number of reasons.
- Methodological issues
- Using secondary data
- Different ways of measuring area...
- Metrics and measurements
- Need to consider an individual's behaviour in space and time.



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Public Health
England

Protecting and improving the nation's health

Spatial Planning for Health

An evidence resource for planning
and designing healthier places

PHE June 2017

Food environment

The food environment plays an important role in promoting a healthy diet, but this is a complex system influenced and determined by a series of factors, including a person's proximity to food retail outlets and the type of food available. Vulnerable groups, including those on a low income, children, young people, those who are overweight or obese, and those of certain ethnicities, are less likely to achieve a healthy and balanced diet. To date, there is relatively limited good quality review level evidence on the influence of the food environment on health and wellbeing outcomes. However, existing evidence indicates that making healthier foods more accessible and increasing provision of low cost healthier food could be effective interventions, but these are likely to be more effective as part of a whole system approach to diet and obesity.



Healthier Foods

Quality of Evidence:

- ▲ Improved
- ▼ Reduced
- High Quality
- Medium Quality
- Low Quality
- NR (Not reported):
Methodological quality of the original research is unclear and should be treated with caution.

Greyed Out Text

Association between a health impact & health outcome not obtained as part of the umbrella review.

Best Available Evidence:

- * In some instances, more than one piece of review-level evidence reporting on the same health impacts and/or outcomes was identified as part of this umbrella review. In such instances this table highlights findings of the review(s) which reported evidence of the best

Planning Principles

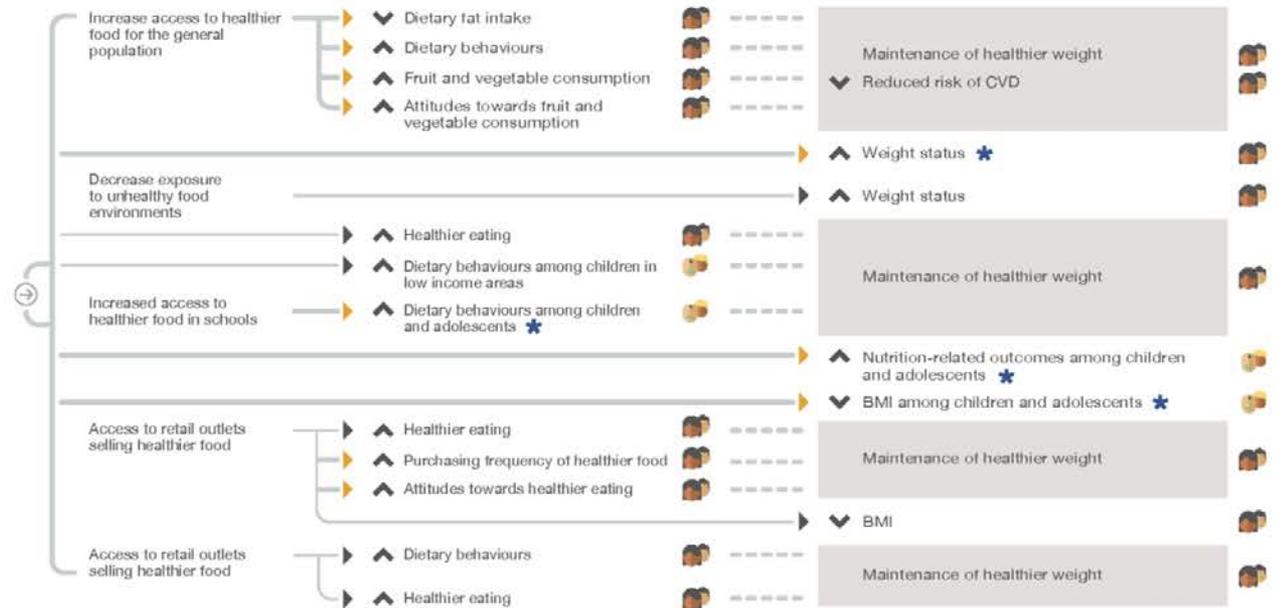
Modifiable Features

Impact

Health Outcomes



Provision of healthier, affordable food for the general population



- Positive association between the density of unhealthy food outlets in a neighbourhood and the prevalence of overweight and obesity in children. Cetateanu A et al, Health & Place, 2014.
- Concentration effect – clustering of takeaway and fast food outlets in areas of deprivation. Macdonald L, et al, Appetite 2007
- Deprivation Amplification
 - exposure to fast food affects all SE groups – lower SES consumed more fast foods, have higher body weights, and more likely to be obese.
 - High fast-food outlet exposure amplified differences in fast-food consumption across levels of education. Burgoine, T et al, AJCN 2016
- Fast food *access* is associated with *intake*. Bernsdorf KA, et al. Health & Place 2017
- Role of supermarkets Burgoine, T et al, . International Journal of Environmental Research and Public Health, 2017

What do local authorities need to do?

- Limit the growth and proliferation of unhealthy food outlets
- Sounds simple....but

The night time economy - food environment





275ml
4% ABV

bottle of alcopop

1.1 Units

=

1 Hawaiian pizza slice

170 Cals

A diagram on a checkered background comparing the alcohol content of a bottle of alcopop to the calories of a slice of Hawaiian pizza. On the left, a blue bottle of alcopop is shown with a speech bubble containing "275ml 4% ABV". Below it, the text "1.1 Units" is written. In the center, an equals sign "=" is shown. On the right, a slice of Hawaiian pizza is shown. Below it, the text "170 Cals" is written.

Tipping the scales

Case studies on the use of planning powers to limit hot food takeaways



Case studies

<https://www.local.gov.uk/sites/default/files/documents/tipping-scales-case-studi-bff.pdf>

A FAST food boss defends super-size portions as he shows off a munchy box crammed with 3,600 calories.

Rafid Almussawi, 33, flogs 50 of the [£9.95 boxes](#) a week at his Tartan Fish and Chips in Cessnock, Glasgow.



The £9.95 box is one of Rafid's best-sellers



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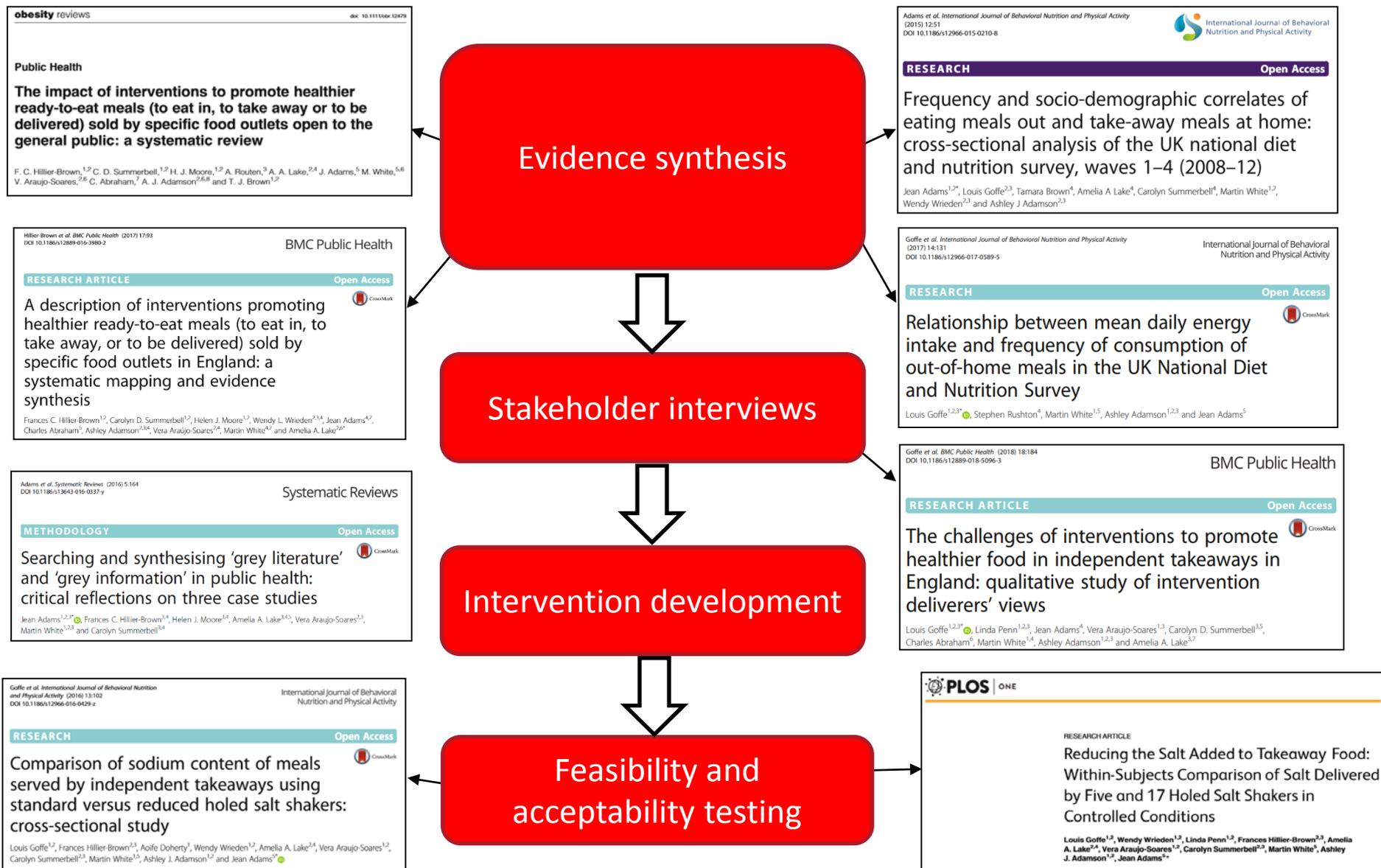
Transforming the 'Foodscape':

Development and feasibility testing of interventions to promote healthier take-away, pub or restaurant food



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England



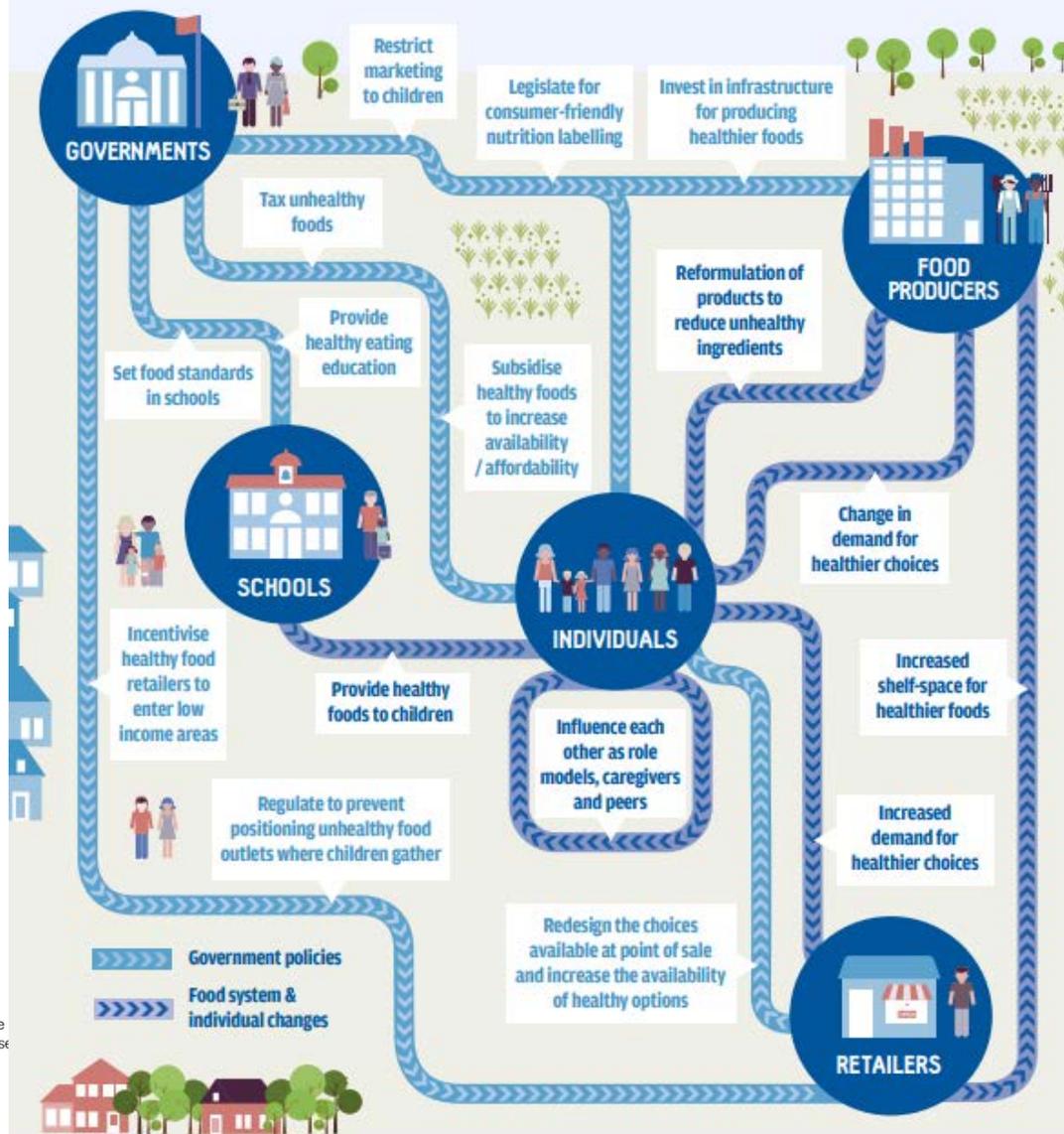
Strategies for Encouraging Healthier 'Out of Home' Food Provision

A toolkit for local councils
working with small food
businesses



HOW CAN GOVERNMENTS SUPPORT HEALTHY FOOD PREFERENCES?

The food system is an interconnected network of producers, industry, and institutions. But at its heart is the individual. Policy can affect all parts of the network, influencing a cultural shift towards healthier food preferences.



The Lancet:
Obesity 2015



NOURISHING recognises that policy actions are needed within three domains: **food environment, food system and behaviour change communication**. The evidence shows that each domain is important in influencing how and what we eat.

N O U R I S

FOOD ENVIRONMENT

H

FOOD SYSTEM

I N G

BEHAVIOUR CHANGE

POLICY AREA

N	Nutrition label standards and regulations on the use of claims and implied claims on food
O	Offer healthy food and set standards in public institutions and other specific settings
U	Use economic tools to address food affordability and purchase incentives
R	Restrict food advertising and other forms of commercial promotion
I	Improve nutritional quality of the whole food supply
S	Set incentives and rules to create a healthy retail and food service environment
H	Harness food supply chain and actions across sectors to ensure coherence with health
I	Inform people about food and nutrition through public awareness
N	Nutrition advice and counselling in health care settings
G	Give nutrition education and skills

WORLD OBESITY

INFORMAS

INFORMAS

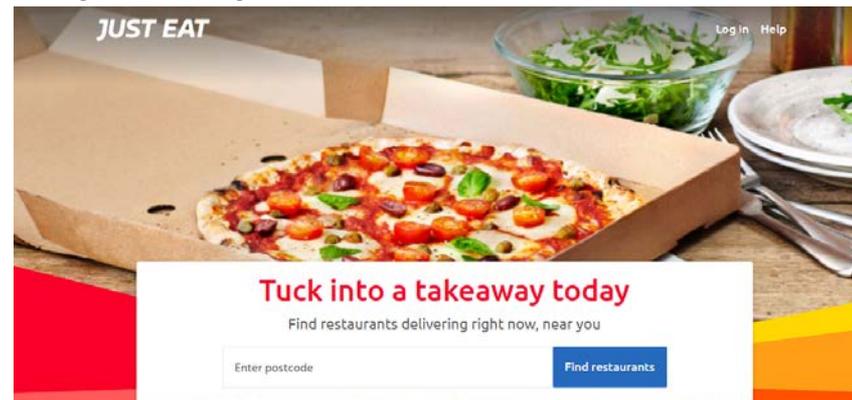


Benchmarking food environments

INFORMAS (International Network for Food and Obesity / non-communicable Diseases Research, Monitoring and Action Support) is a global network of public-interest organisations and researchers that aims to monitor, benchmark and support public and private sector actions to create healthy food environments and reduce obesity and non-communicable diseases (NCDs) and their related inequalities.

Ways forward

- SPDs/ local plans – what is the best way to take forward healthy foodscape?
- Working with food businesses (Foodscape study)
- How can planning and licensing work together with public health to address the Toxic High Street: The obesogenic and intoxicogenic environments?
- Beyond the highstreet: thinking about alternative food environments & new ways to purchase food.



Acknowledgements



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Prof Tim Townshend



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