



# SPOTLIGHT for policy-making

*SPOTLIGHT – Sustainable prevention of obesity through integrated strategies*

Summary of the findings of the €3.7m SPOTLIGHT study of the obesogenic environment and the strategies for successful community intervention.

SPOTLIGHT Project – Sustainable prevention of obesity through integrated strategies

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# SPOTLIGHT – Sustainable prevention of obesity through integrated strategies

Policy-formation will benefit from SPOTLIGHT's new analytical tools that have been made freely available.

## Two new tools for policy-based evidence building

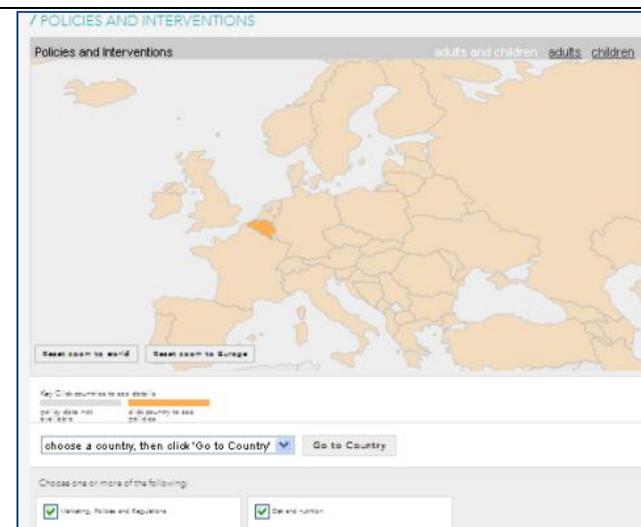
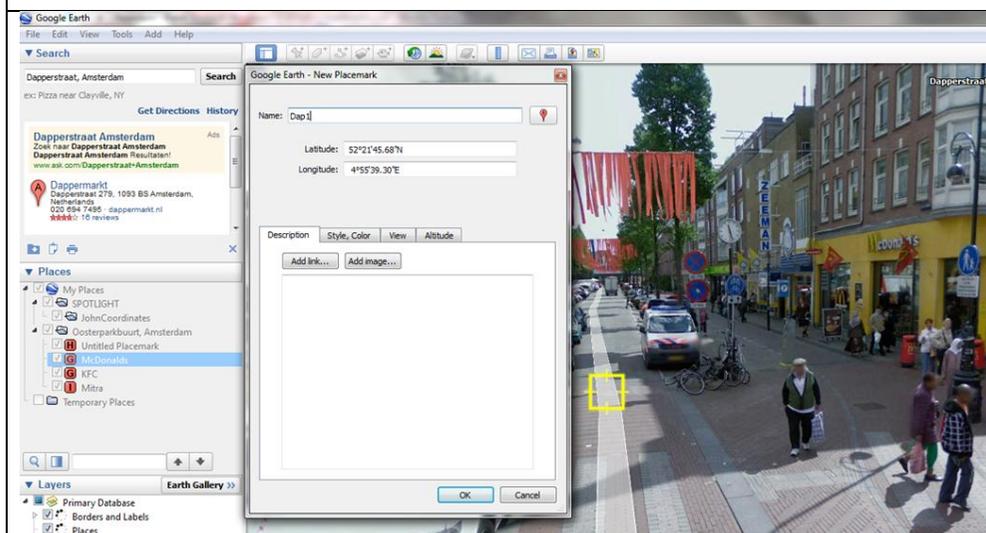
**An audit tool for the assessment of built neighbourhoods** using web-based remote sensing or direct observation. Available here:

<http://ij-healthgeographics.biomedcentral.com/articles/10.1186/1476-072X-13-52>

**An interactive map-based database of recent and ongoing community-level health promotion interventions** in EU member states.

Available in English and French language here:

<http://www.worldobesity.org/what-we-do/policy-prevention/projects/spotlight/intervention-atlas/>



## SPOTLIGHT – Sustainable prevention of obesity through integrated strategies

The SPOTLIGHT project 2012-2016 investigated a number of questions concerning obesity prevention and multi-level interventions to prevent obesity and promote better health behaviour among adult populations. These questions are listed here with a short summary of the main findings relevant to policy-making.

### 1. What characteristics of *individuals* are associated with better bodyweight regulation, physical activity and diet?

Evidence review	Lessons from SPOTLIGHT
<p>The strongest evidence available suggested several important and potentially modifiable characteristics of individuals. These were:</p> <ul style="list-style-type: none"> <li>• <i>body image</i> (attitudes associated with the mental representation of one's body): positive body image is associated with better weight outcomes, poor body image is associated with less success at weight loss and a history of weight loss treatment failure;</li> <li>• <i>autonomous motivation</i> (belief that the individual has choice and self-determination): higher autonomous motivation is associated with better weight outcomes;</li> <li>• <i>flexible eating restraint</i> (flexibility in following a diet): greater flexibility is associated with better understanding of the impact of diet on energy balance and with better weight outcomes;</li> <li>• <i>self-efficacy</i> (confidence and competence to overcome barriers and achieve a goal): higher levels of self-efficacy are associated with solving problems and adopting changes in health-related behaviours;</li> <li>• <i>self-regulatory skills</i> (includes monitoring one's own behaviour, setting goals and planning their achievement): higher levels of skill are associated with better weight regulation.</li> </ul> <p>For physical activity, the main predictors of successfully maintaining higher levels of activity were <i>autonomous motivation</i>, <i>self-efficacy</i> and <i>self-regulatory skills</i>. For diet, there were no consistent predictors.</p>	<p><b>Lesson: Interventions to promote healthy behaviour should take account of individual differences in specific perceptions, attitudes and behaviour patterns.</b></p> <p><b>Lesson: There is a lack of research on the potential to change modifiable individual characteristics through increases in social networking and social capital (see question 3 below).</b></p>

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### 2. What characteristics of the physical environment are associated with a raised risk of adult obesity?

Evidence review	Lessons from SPOTLIGHT
<p>A systematic review revealed that <i>urban sprawl</i> and <i>land use mix</i> were consistently associated with obesity risk: higher levels of urban sprawl (a composite measure of low residential density, segregated land use, and higher automobile dependence) was associated with higher levels of obesity. Lower levels of land use mix (a measure of diversity of land use) were associated with higher levels of obesity. These two dimensions have been widely studied in the USA but less studied in Europe or Australasia. Comparison between studies from Europe, North America and Australasia generated varied results due to the different methods and measures used. Many studies lacked representativeness, validity and reliability. Results from the SPOTLIGHT survey of 60 urban neighbourhoods in five EU countries found that residents from low-SES neighbourhoods ate less fruit and vegetables, drank more sugary drinks and had a consistently higher BMI. Residents from neighbourhoods with low housing density were less physically active than those with high housing density, both during leisure time and for transport.</p>	<p><b>Lesson: Urban design has a significant role to play in health promotion, but there is no single effective approach; the types of enhancements needed take different forms, in different neighbourhoods, for different populations.</b></p> <p><b>Lesson: Prior to the SPOTLIGHT project there was a lack of high quality research on this topic in Europe. Researchers should carefully consider local conditions and local needs.</b></p>

### 3. What characteristics of the social environment are associated with a raised risk of adult obesity?

<p>A systematic review of social environmental determinants found some evidence that social capital and collective efficacy were both linked to a reduced likelihood of obesity. Social capital includes social networks and interdependencies such as kinship ties, professional connections, neighbours around place of residence and cultural identity ties. Furthermore, social capital (based on social networks with reciprocity and trustworthiness) and collective efficacy (the extent to which individuals in a neighbourhood help others) were associated with better health behaviour. The review found low methodological quality among the majority of the studies reviewed, and a lack of methodological consistency. Results from the SPOTLIGHT survey of 60 urban neighbourhoods in five EU countries found that residents in neighbourhoods with higher levels of social networks and social cohesion had better self-rated health, lower odds of obesity and higher fruit consumption.</p>	<p><b>Lesson: Strengthening social ties in a neighbourhood, reflected in the strength of its networks and community support activities, is an essential component of health improvement.</b></p> <p><b>Lesson: Additional good quality research in this area is needed.</b></p>
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### 4. What are the characteristics of multi-component interventions which help meet their objectives?

Evidence review	Lessons from SPOTLIGHT
<p>Multi-level interventions (which target individuals and environmental determinants) are generally more effective than interventions which only target individuals without making environmental changes, or which make environmental changes without including individually-targeted health promotion. Interventions may involve large population groups or local communities, neighbourhoods or workplaces.</p> <p>Behaviour change is most likely to occur if (i) participants at all levels are involved from the early planning stages, (ii) if efforts are made to communicate the innovative nature of a project, and (iii) make use of digital technology, websites and social media to maximise dissemination. These findings echo previous research which identified: participant engagement; leadership; community involvement; external support; understanding the root causes of community problems; internal and external resource mobilisation; nurturing skills and knowledge; linking with others; and a sense of a community seeking a common vision.</p> <p>Case studies of community interventions highlighted the need for community involvement and avoiding 'top down' structures, often due to the funding mechanisms which do not allow for participant involvement prior to grant applications.</p>	<p><b>Lesson: Sponsors of interventions should consider a two-phase funding approach, starting with an initial needs assessment involving the community to develop the plans for the project, followed by the main intervention.</b></p> <p><b>Lesson: Obtaining details of community interventions is time-consuming and difficult, with project staff unwilling to spend time on providing information or discussing project outcomes or evaluation. Such dissemination should be stipulated as a core requirement of intervention project grants.</b></p>

### Further reading

- Gubbels JS et al, The assessment of ongoing community-based interventions to prevent obesity: lessons learned. *BMC Public Health*, 2015, 216, 1-11.
- Lakerveld J et al, Obesity-related behaviours and BMI in five urban regions across Europe: sampling design and results from the SPOTLIGHT cross-sectional survey. *BMJ Open*, 2015, 5, e008505, 1-9.
- Bethlehem JR et al. The SPOTLIGHT virtual audit tool: a valid and reliable tool to assess obesogenic characteristics of the built environment. *Int J Health Geogr.* 2014;13:52-59.
- Report of the SPOTLIGHT meeting on *The future of research into obesity*, Brussels, 19 November 2015. [http://www.worldobesity.org/site\\_media/uploads/Brief\\_meeting\\_report\\_-\\_v.2.pdf](http://www.worldobesity.org/site_media/uploads/Brief_meeting_report_-_v.2.pdf)
- Report of SPOTLIGHT WP6 on *Successful community interventions* [http://www.worldobesity.org/site\\_media/uploads/Briefing\\_on\\_community\\_interventions.pdf](http://www.worldobesity.org/site_media/uploads/Briefing_on_community_interventions.pdf)
- Rutter H, Glonti K. The SPOTLIGHT Project: Sustainable Prevention of Obesity Through Integrated Strategies in Europe. *Obesity Reviews* 2016, 17: Suppl 1:5-109.

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## Funding community interventions: what did SPOTLIGHT tell us?

A desk-based survey of 33 interventions, a survey of 80 community projects, and in-depth studies of three interventions (in UK, Denmark and Netherlands) indicated several lessons to inform funding agencies when sponsoring interventions for health promotion. These are:

- Include all types of participants in the initial design of the project, including the target population, delivery staff and sponsors. This may require ‘two-phase’ funding, with an initial fund for participatory design and piloting of the intervention, and a second phase to implement it if the initial phase is inclusive with the target population being supportive of further work.
- Funders should encourage flexibility and security: activities and goals need to be adapted while the project is implemented.
- Complex community-based interventions can experience tensions between delivering a good quality effective project in a short period of time on the one side, and engaging the community and its organisations and leaders on the other. Funders should support engagement of this type, and thereby encourage the project to be maintained in the long term.

## Research to support policy development: next steps after SPOTLIGHT

There are clear gaps in policy-relevant research. These can be categorised as

- Engagement and empowerment – what methods can ensure participants have involvement and investment in making change?
- Tools – how should policy be implemented: e.g. legislative, fiscal, market restriction, educational, skill-development, and how should they be combined and delivered?
- Individuals in environments – how do individuals experience physical and financial environments and make use of social environments, in shaping their behaviour?
- The value of Europe – what can the unique range of cultures, behaviours, diets, inequalities and institutional opportunities tell us about responses to interventions?
- Complex adaptive systems – what insights from systems theory can help us modify natural responses to a complex suite of socio-environmental determinants?
- Political mandate and action – what institutional reform might ensure that research funding strengthens policy development?



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