



The food environment of post-primary school children.

Presented by: Mary Callaghan
mary.callaghan@nuigalway.ie

Callaghan, M., Molcho, M., Nic Gabhainn, S. & Kelly, C.
Health Promotion Research Centre, National University of Ireland,
Galway



NUI Galway
OÉ Gaillimh



HBSC study

- World Health Organisation (WHO) cross-national research project
- Improve understanding of young people's health and wellbeing
- 4 year cycle
- Children's health behaviours and context

Context

- Increasing trend in overweight and obesity in children in Ireland – 20-25% primary school children 19% of teenagers

IUNA, 2005, 2008

- Social, physical and individual factors

Finegood et al., 2010, Butland et al., 2007

- Eating out of home

Mikkelsen et al, 2011

- School food environment

Children - time in this setting

Background

2010

2011

2012

...

2015



HOME BREAKING NEWS IRELAND

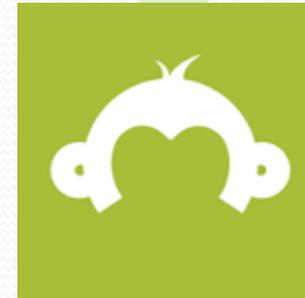
Fast food outlets face school ban

257 9 10

Wednesday, November 09, 2011 - 01:48 PM



Fast food outlets are to be banned near schools, under plans being considered by the Government.



HIE 115,2

Food for thought: analysing the internal and external school food environment

Mary Callaghan, Michal Molcho, Saoirse Nic Gabhainn and Colette Kelly
Health Promotion Research Centre, National University of Ireland Galway, Galway, Ireland

152

Resub: 30 April 2014
Resub: 29 June 2014
Accepted: 29 July 2014

Abstract
Purpose – Availability and access to food is a determinant of obesity. The purpose of this paper is to examine food availability within and outside of post-primary schools in Ireland.
Design/methodology/approach – Data on the internal school food environment were collected from 60 post-primary schools using questionnaires. The external school food environment for these 60 schools was assessed by mapping food businesses within 1 km of schools, using a Geographic Information System (GIS). Food businesses were categorised based on type of food sold.
Findings – A total of 98.2 per cent of schools had a canteen, 52.5 per cent had a small food shop and 27.2 per cent had a vending machine. A total of 82.7 per cent of schools reported selling chips/french fries in their canteens while 44.2 per cent of schools reported selling energy-dense nutrient-poor foods in their school shops. Of the schools surveyed, there was an average of 189 fast-food shops and sandwich bars, 3,85 full-service restaurants, 2,69 pubs and other "other" restaurants, 400 fast-food restaurants, 1,95 supermarkets, 673 food shops and 972 fruit and vegetable retailers within a 1 km radius of the post-primary schools. Findings are presented by geography (urban/rural), disadvantage (Delivering Equality of Opportunity in Schools (DEIS) vs. non-DEIS) and gender (girls/boys) and food sales to take at the school canteen.
Practical implications – These data will facilitate schools working on the framework for Health Promoting Schools in Ireland.
Social implications – This work can contribute to current discussions on restricting accessibility to certain foods and food premises for school children.
Originality/value – The study explores the internal and external school food environment. GIS have been used to link the external food environment to specific schools thus allowing a comprehensive overview of the schools' food environment. To the authors' knowledge, this is the first time that both environments are explored simultaneously.
Keywords Students, Ireland, Health promotion, Health promoting schools, Schools, Health, Children, Obesity, Childhood obesity, Food and nutrition
Paper type Research paper



NUI Galway
OÉ Gaillimh



Aims

- To map food premises within 1km of post-primary schools that took part in the 2010 HBSC survey in Ireland
- To characterise these food premises based on food sold



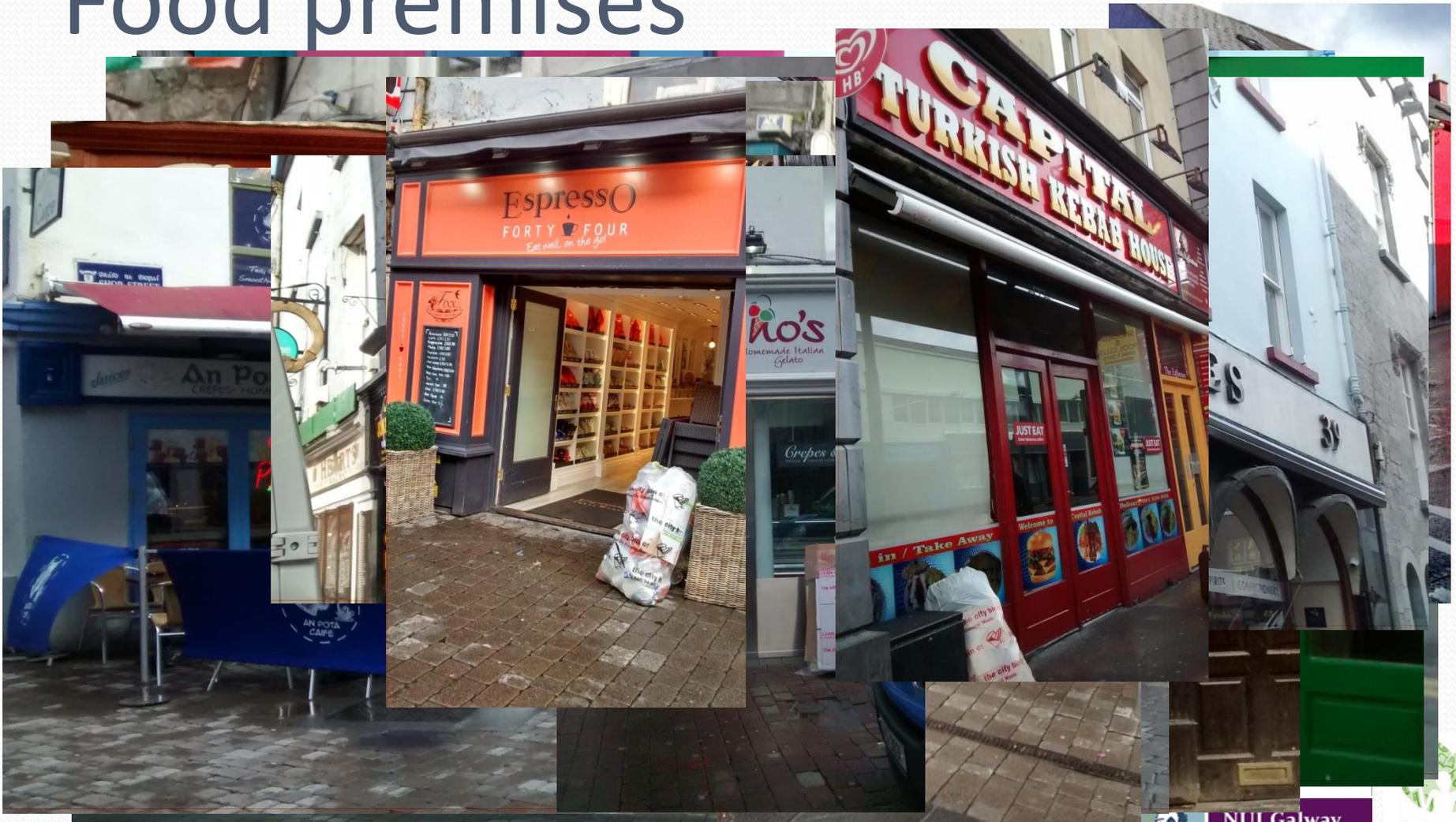
Methods

- Identifier file – school name, address, gender, DEIS status
- Geocode schools (n=63)
- Export food selling premises from GeoDirectory and categorise them based on food sold
- Create a spatially enabled dataset containing school food information and external food premises within a 1km buffer within ArcGIS

Categorisation process

- Food premises categorisation
 - Internal and **external**
 - Where children are likely to eat?
- Coffee shops and Sandwich bars, Full service restaurants, Asian and other ethnic restaurants, Fast food outlets, Supermarkets, Local shops and Fruit and vegetable retailers
- Businesses own website, online directories, Street View

Food premises



Results

Food outlet	Mean number
Coffee shops & sandwich bars	3.89
Restaurants	3.65
Asian & 'Ethnic' restaurants	2.60
Fast food outlets	4.03
Supermarkets	1.95
Local shops	6.71
Fruit/Veg shops	0.73

Conclusion

- Variety of food retail outlets surrounding schools
- Supportive environments for young people?
- Legislation the way forward?
- Enabling healthy choices is challenging



Next steps

- Link the school level data to student dietary habits
- Qualitative work
 - How students perceive and use their food environment
 - Maps
 - Focus groups

Thank you...

- Schools and students that took part in data collection
- HBSC network of researchers
- Department of Health
- Department of Children and Youth Affairs
- Professor Candace Currie, International Coordinator, St. Andrews University
- Professor Oddrun Samdal, Data Bank Manager, University of Bergen
- And to you for listening....