



**NUI Galway**  
**OÉ Gaillimh**



# **School food environments and adolescent health**

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*Symposium: Obesity across childhood and adolescence  
EHPS, Galway, August 2018*

# Background

- Adolescent are not meeting dietary recommendations and youth overweight is of public health concern <sup>1</sup>
- School food environments – important context to support and enable healthy food choices <sup>2</sup>
- Evidence to date for a role of external school food environment and diet is equivocal <sup>3</sup>
  - Mostly cross-sectional studies and from North America
  - Cultural, environmental, behavioral and planning or regulatory factors
  - Methodological issues and the environmental data sources
- Data in Ireland are lacking



# Aim

***Study 1: To examine associations between fast food outlets surrounding post-primary schools and youth dietary habits***

- Using cross-sectional HBSC Ireland survey data
- [www.hbsc.org](http://www.hbsc.org); [www.nuigalway/hbsc](http://www.nuigalway/hbsc)



***Study 2: To explore adolescent's perception of local school food environment***

- Qualitative multi-method study with post-primary school students

# Methods

## Study 1- HBSC Ireland (n=63 schools; 5344 students)

### Student-level data

- Demographics,
- Daily fruit, veg, sweets, soft drinks
- Family food environment

### School-level data

- School food availability
- Urban/rural status

### GIS

- Geocoded PP schools
- 1km buffer
- Categorised food outlets

## Multivariate logistic regression

## Study 2- Mapping N=6 schools; 96 students

### Focus groups

- n=6 schools
- Mapping exercises
- Topic guide
- Photos

## Thematic analysis

# Associations between fast food environments and diet

n=5,344

	Fruit daily	Vegetables daily
	<b>Adjusted Odds Ratios</b>	
Food sold in school	0.87	1.05
Rural	0.92	1.04
>10% fast food within 1km	0.78*	0.79**
DEIS schools	0.79*	0.73**

\*p<0.05; \*\*p<0.01; \*\*\*p<0.001

*Controlling for demographic, family food environment and school (DEIS, internal food availability)*

# Associations between fast food environments and diet n=5,344

	Soft drinks daily	Sweets daily
	<b>Adjusted Odds Ratios</b>	
Food sold in school	0.99	0.91
Rural	0.76	0.86
>10% fast food within 1km	1.00	0.94
DEIS schools	1.79***	1.00

\*p<0.05; \*\*p<0.01; \*\*\*p<0.001

*Controlling for demographic, family food environment and school (DEIS, internal food availability)*

# Study 2 Results – Food Outlets (AVAILABILITY)

Spar/Londis/  
Centra/Costcut  
ter

Lidl/ Aldi/  
Dunnes

Topaz

Subway

Apache/  
Papa Johns/  
Dominos

Local  
supermarkets

Supermacs/  
Mc Donalds/  
BK

Local fast  
food  
places

Supervalu

Local  
Cafes



Sweet shops

Local pubs

Easons

Local  
health  
food shop

Local  
restaurants

Local hotels

# Study 2 Results – FOODS PURCHASED

Health bars

Sesame sticks

Energy drinks –  
Edge, Lucozade  
sport

Coffee

7up/Coke/Mi  
wadi

Pot  
Noodles

Milk,  
water

Biscuits,  
buns

Croissant

Nuts,  
popcorn

Yoghurt



Burgers,  
pizza

Salads, fruit  
salads

Chocolate,  
donuts

Sweets

Chicken curry,  
lasagne

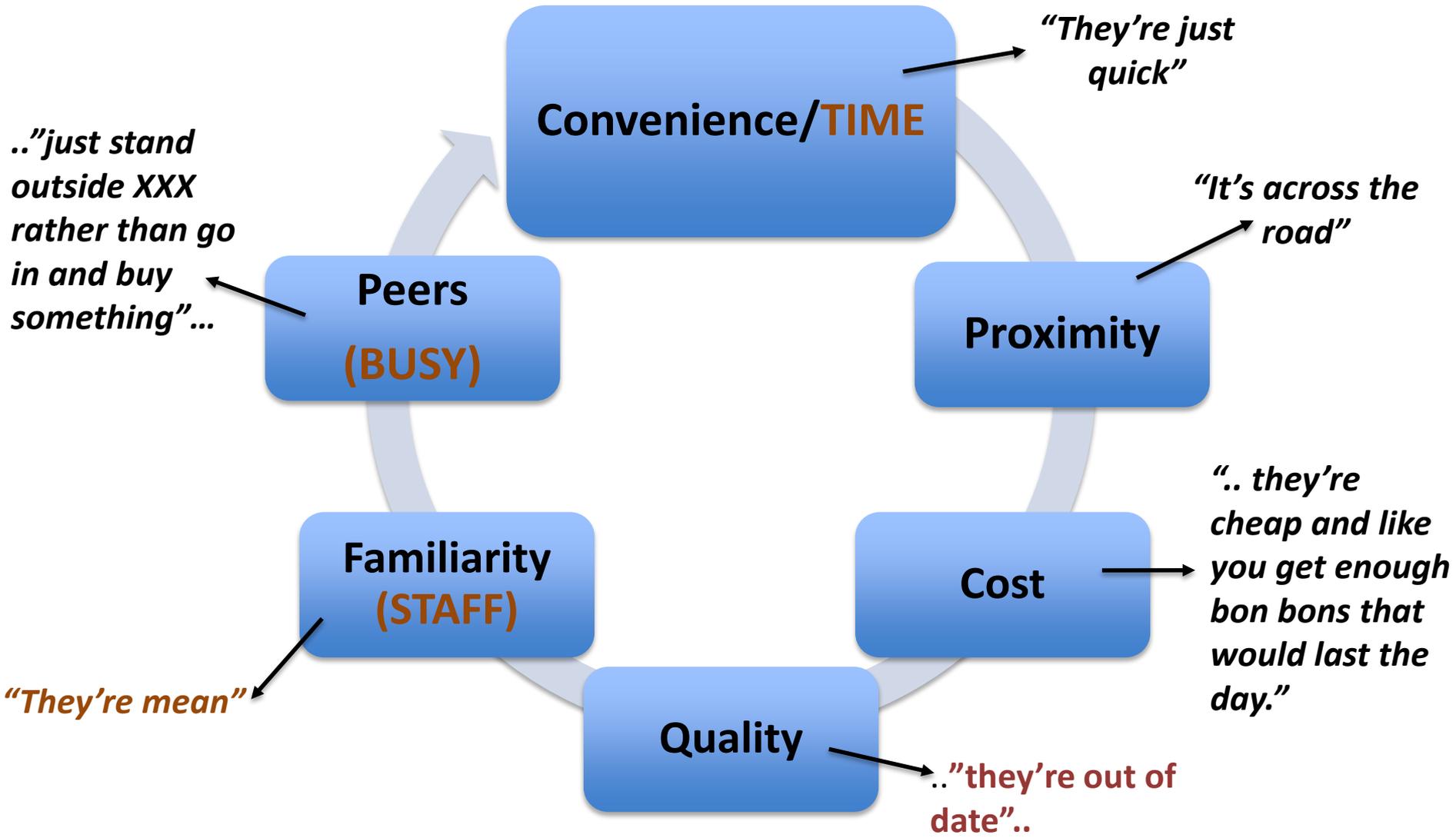
Wedges

Wraps, paninis,  
soup

Sausage (rolls)  
and chips

Hot chicken  
fillet rolls

# Drivers: food outlets and food choice



# Conclusion

- Poor dietary habits reported by students – objective and subjective data
- The healthy choice is not the easy choice
- Need to re-consider a ban on fast food premises near schools
- Time to align health with planning for the built environment
- Important to work with students, schools and local food outlets to impact youth health.



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# Acknowledgments

- Thank you to all children, parents, teachers and school managements
- The Department of Health
- Millennium Fund Project Grant, NUI Galway
- The HBSC National Advisory Committee
- Professor Candace Currie, International Coordinator of HBSC, University of St. Andrew's
- Professor Oddrun Samdal, Data Bank Manager, University of Bergen
- All members of the international HBSC network
- HPRC researchers: Mary Callaghan, Ursula Kenny, Lorraine Burke and Grace O'Shea

Ethics granted by NUI Galway Research Ethics Committee

# THANK YOU



# Questions?



# References

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3. Williams, J., et al. (2014). *Obesity Reviews*, 15(5), 359-374. doi: <http://10.1111/obr.12142>