Foodscape

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Kelly Rose RNutr, PGCE, BSc (hons)

2011 – 2018	Teacher of Food and Nutrition ages 11-18 years
2013 – 2018	Head of Health education, Macmillan Academy, Middlesbrough
2018 – present	Graduate tutor/PhD candidate, Teesside University

The role of ‘Head of health education’

Whole school approach; 5-year plan: communicate and educate

- **Knowledge via embedding nutrition education** and messaging: cross curricular; science, food tech, tutor time, assembly, campaigns, dining hall poster/leaflets, stall etc.

- **Environment changes:** Working with catering to meet SFP

- **Behaviour change/social influencing:** SNAG, Staff healthy champions, PSHE content (mindset, habit forming), PE lesson changes introducing 1 hour a week; heart rate raising fun – student/teacher choice

Challenges

- Implementation of national school food policy; loss of support from LA 2013/14 (healthy eating in schools), other schools not prioritising – students aware, Catering budget, pressure to produce food staff and YP want to eat

- Staff ‘buy in’– most important part of the role is building ‘Relationships’

- Schools head of health education role
- Defining ‘Foodscape’ and influencing food choice
- University campus research
- Teesside University food choice
- Effective school intervention/policy findings
- Systems thinking – Whole systems approach PHE guidance

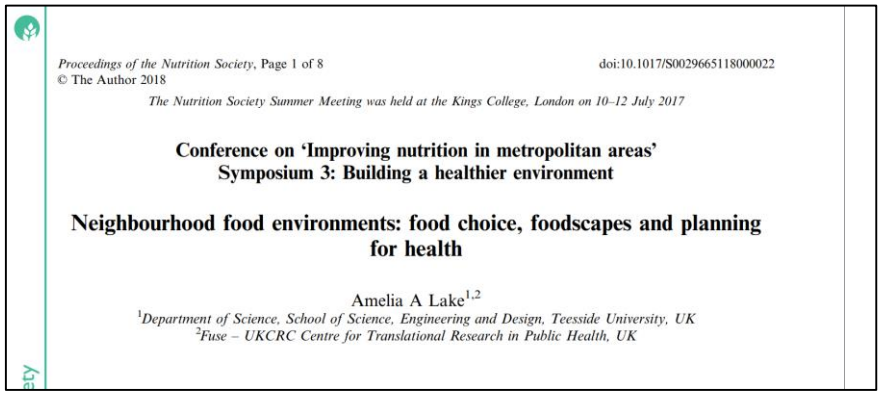
FOOD SCAPES

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

Influencing food choice

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.



Proceedings of the Nutrition Society, Page 1 of 8 doi:10.1017/S0029665118000022
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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]
[1]*Department of Science, School of Science, Engineering and Design, Teesside University, UK*
[2]*Fuse – UKCRC Centre for Translational Research in Public Health, UK*

See also:

Ensaff, H., Homer, M., Sahota, P., Braybrook, D., Coan, S. and McLeod, H., 2015. Food choice architecture: An intervention in a secondary school and its impact on students' plant-based food choices. *Nutrients*, *7*(6), pp.4426-4437.

Thaler, R. & Sunstein, C. (2009) *Nudge: Improving Decisions about Health, Wealth, and Happiness.* London: Penguin.

The Context

- Many decisions about food are automatic rather than reflective
- Persistant inclination to overemphasise the importance of knowledge, while undervaluing the influence of external factors on human behaviour
- Education about healthy diets isn't enough to change behaviour
- Changes in environmental cues to consumption are needed to change diet

Jebb, SA Proceedings of the Nutrition Society (2018), 77, 106–111

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Around the University campus

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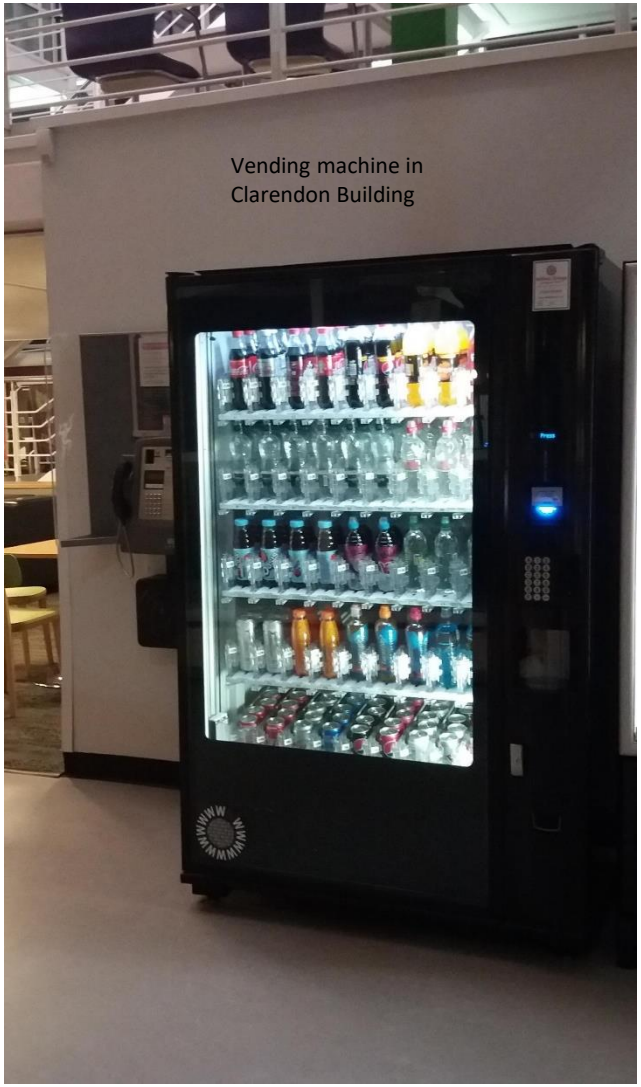
Teesside University Food Choice

Vending machine in the Library

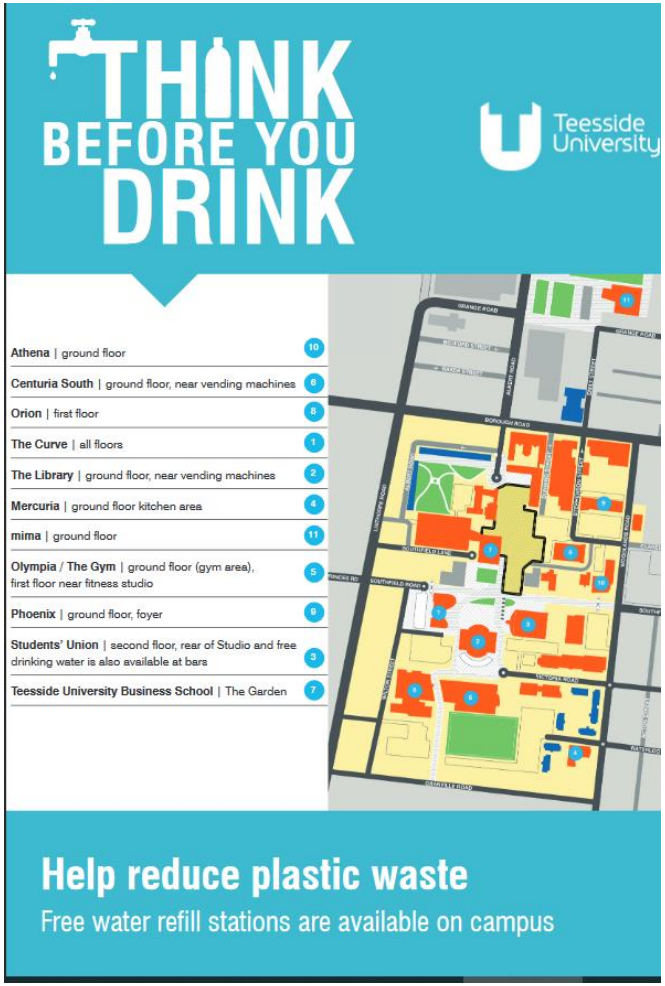

Vending machine in Clarendon Building

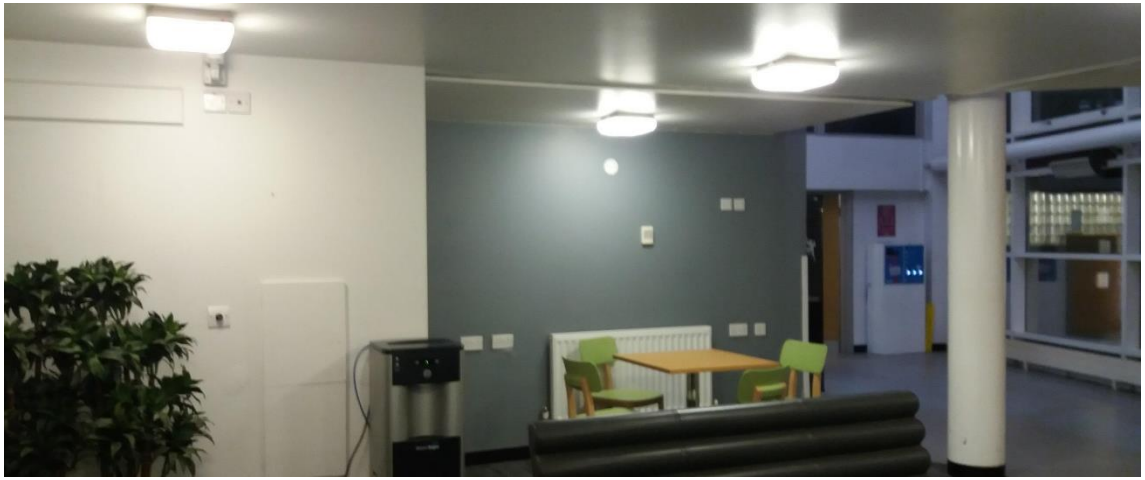
Vending machine at Tower Building

Stephenson Building

Vending machine in Stephenson Building

Students' Union Building





Free drinking water at Teesside University

University campus – research in context

University students may consume poor quality diets, with potential implications for body weight and long-term health

4 major dietary patterns revealed in University students:

1.vegetarian
2.snacking
3.health-conscious
4.convenience, red meat & alcohol

The 'health-conscious' pattern = most favourable micronutrient profile

Sprake et al 2018

Foodscapes and wellbeing in the workplace: a university setting

*Consumers health conscious

*Behaviour did not reflect this

*Food environment perceived as unsupportive to health

*Common themes: availability, time, cost, peer pressure,health

Symonds et al 2013

University policy to improve students' diets should incorporate;

- Promote student engagement in cooking and food prep

- Increased availability of low-cost healthier food items
75% healthy options available Van Kleef et al 2012

Sprake et al 2018

A healthy universities model:
A whole systems approach – University food context

An example where key areas for development were identified

- Clear objectives set
- Regularly reassessed
- Working with catering and external agencies and suppliers.

Having a clear goal/mission allowed a coherent and joined up approach

Doherty et al., 2011

Exploring university student eating behaviours

Determinants of eating behaviour in university students: a qualitative study using focus group discussions

Students reported to be influenced by:

- **Individual factors** - taste preferences, convenience, self-discipline
- **Social networks** - (lack of) parental control, peers
- **Physical environment** - accessibility, appeal, cost and macro environment (e.g. media and advertising)
- Other factors: residency, student societies, exams

Recommendations:

- Provide information and advice to enhance healthy food choices and preparation, enhance self-discipline/control, developing time management, social support, and modifying campus food

Deliens et al., 2014

Eating Behaviours of British University Students: A Cluster Analysis on a Neglected Issue

- 4 clusters were identified: risky eating behaviours, mixed eating behaviours, moderate eating behaviours, and favourable eating behaviours
- 19% of students were categorised as having ‘favourable eating behaviours’ under a third of students within 2 most risky clusters
- Riskier eating behaviour patterns associated with living on campus and Christian faith

- Highlighted importance of university microenvironments on eating behaviours
- Religion as a mediator of eating behaviours is a novel finding

Tanton et al., 2015

Opportunities for healthy foodscapes at university – results from interviews and observations at 6 campuses in greater Copenhagen

- Health and sustainability issues perceived as important for students and staff; eating environment played an equally important role
- Influencing student food choice; Price, taste, freshness and labeling; Students expressed interest in nutritional issues as well as environmental topics including organic
- The canteen professionals aware of issues but primarily see the canteen as serving feeding purposes

Mikkelsen & Fredriksen 2012

ENVIRONMENTAL FACTORS THAT INCREASE THE FOOD INTAKE AND CONSUMPTION VOLUME OF UNKNOWING CONSUMERS

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- **Food choice decisions are different from food consumption volume decisions**

- **Food choice** = *what* we eat (soup or salad); **food volume** = *how much* we eat (half of the bowl or all of it)

- **Environmental factors;** package size, plate shape, lighting, variety, or the presence of peers can increase food consumption volume far more than people may realise

This review underscores how small structural changes in food environments can reduce the unknowing overconsumption of food

Wansink 2004

Current Secondary school review findings

Adolescent foodscape – school context

The impact of, and views on, school food policy in young people aged 11-18 years in Europe: a mixed methods systematic review

- **27 papers**; RCT (n9) non RCT/observational (n12), qualitative (n5)
- Nutrition education and FV programmes (plus food aid in low SES areas) significant effects on improved dietary quality in YP
- BMI – prior reviews and this report inconsistent results (the limited effects, missing data and heterogeneity Issues remain) Brown 2008; Jaime 2009; Van Cauwenberghe 2009
- Wellbeing (n3) may be value in SB programmes in improved life perspectives and reduced anxiety Ardic 2016; Busch 2015; Sousa 2019

Multicomponent interventions:

SB studies incorporating embedded change of PA and nutrition knowledge and environment change more likely to improve healthy behaviour in YP

Researchers report challenges/limitations

Differences in implementation – school context

Review findings: Lived experiences of YP

- Still early in our understanding of YP perceptions and views of ‘foodscapes’ (Prof. Wendy Wills, Hertfordhshire)
- Review findings indicate priorities; cost/value for money, taste, freshness and aesthetics influence food choices
- Most influential is peer/social influence

‘Systems science’ - established academic field

- **Different approaches** and multiple theories ‘systems thinking’; dependent on area needs/context
- **Guidance** to approaching complex problems with a tangled web of causations, such as obesity prevention (6 phase process)
- **Aligns with Quality in Public health**; a shared responsibility framework and Sustainable Development Goals
- **Sustainable and long-term vision**; requires commitment, energy and drive

Leadership buy in and understanding of system change essential

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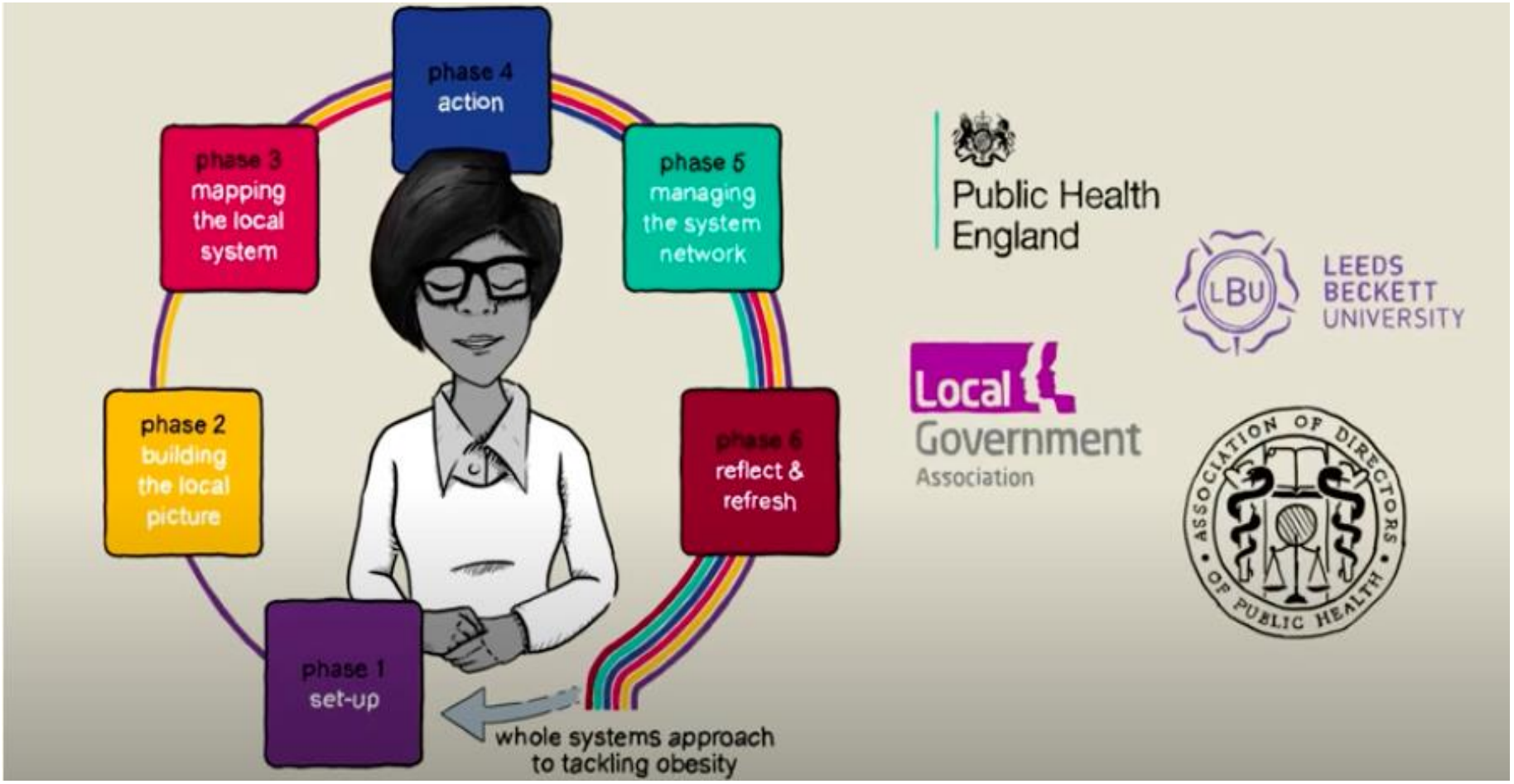

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Future perspectives and recommendations

- Thinking food systems: health & sustainability
- Whole systems approaches e.g. welcome boxes, halls of residence, student union, campaigns, cross university, health champions, student voice
- Including working with catering services (Foodscape study) – identifying opportunity for change and create a development plan, with built in evaluation process
- Community development focus for health promotion and willingness to change existing practice

Change only possible with collaboration and shared mental models

- Collaboration only possible with understanding – lived experience data
- Perceptions and world views of all stakeholders – ‘dominant norms’
- Shared vision – shared goals and direction
- Resistance and not having shared goals barriers to overcome at initial stages (before action)

Hovmand 2013, Allendar et al 2019, Foster Fishman et al, Rutter 2017, Checkland 1981

Acknowledgements

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@Lakenutrition

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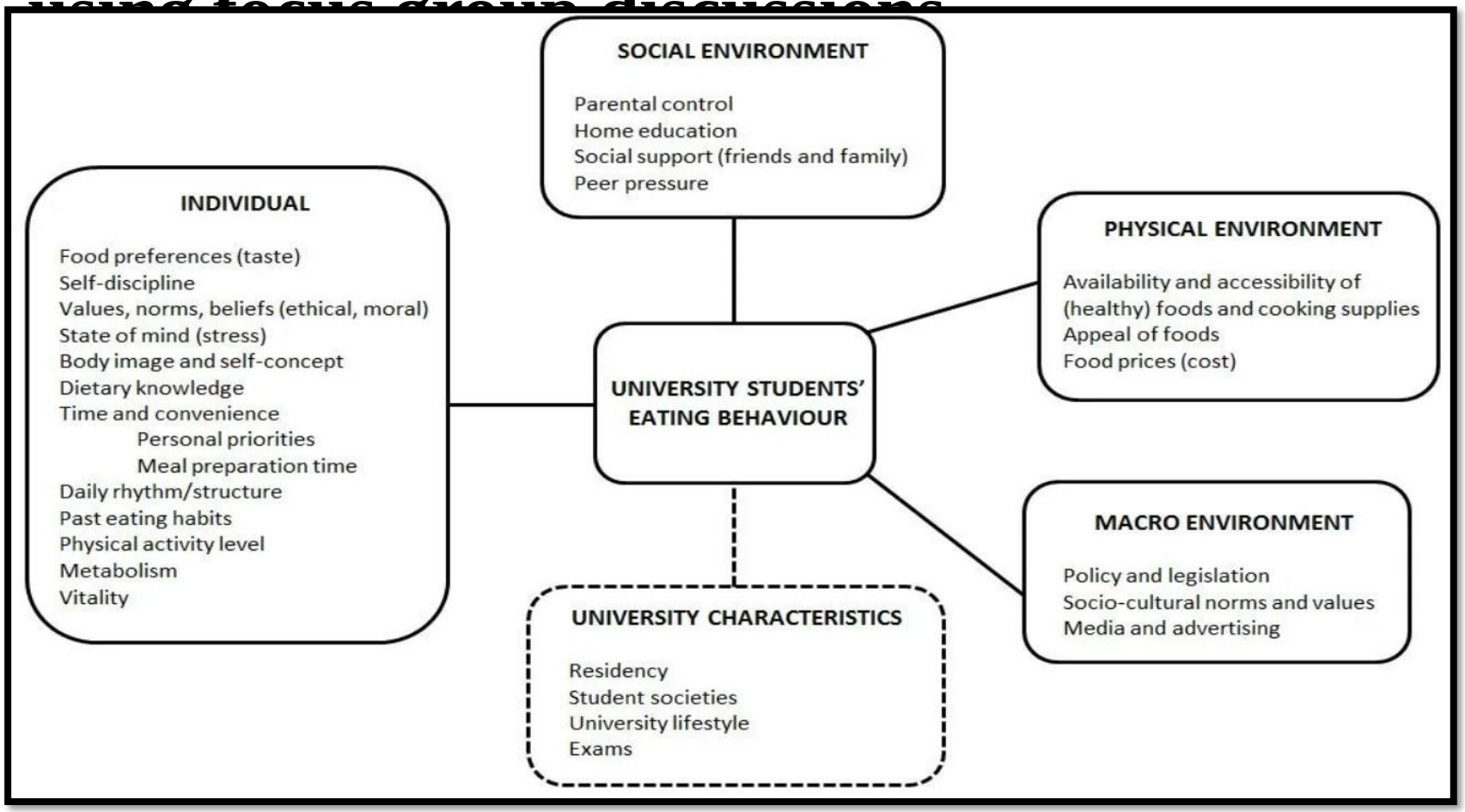
- https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/820783/Whole_systems_approach_to_obesity_guide.pdf

- https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/750679/promoting_healthy_weight_in_children_young_people_and_families_resource.pdf

Pages 22 and 23 relevant guidance and resource signposting for universities working in partnership with LA

Determinants of eating behaviour in university students: a qualitative study using focus group discussions



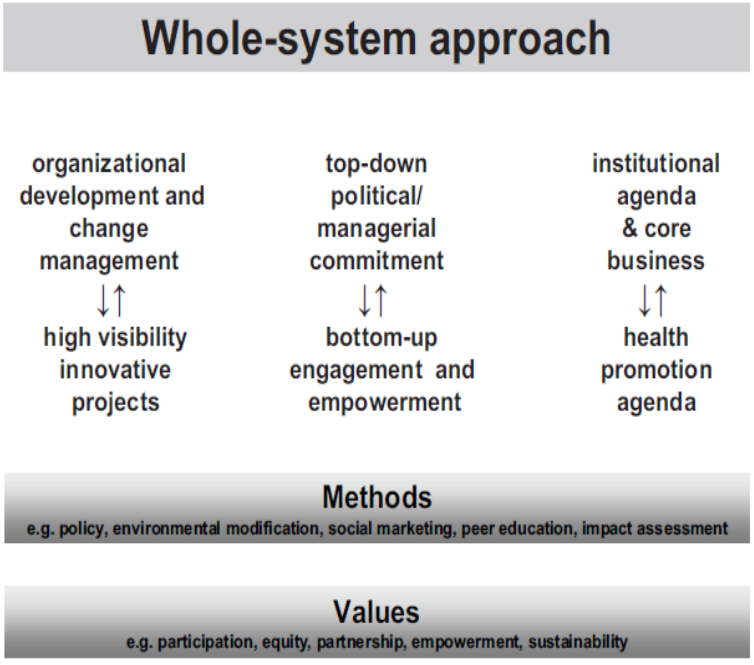
Factors influencing eating behaviours of university students.

Applying the whole-system settings approach to food within universities

A simplified model for conceptualizing and applying the healthy settings approach to higher education

Source: Dooris[18]

A model for conceptualizing and operationalizing the healthy settings approach



Source: Adapted from Dooris,[19] produced with permission from Critical Public Health