

Unhealthy snacks in hospitals:

Changing availability and changing choices

Julia Allan, March 2022

Snacking in hospitals – why the interest?

- Hospitals
 - Hospitals should be health promoting
 - People from all walks of life
- High fat/sugar snacks
 - Not part of core diet
 - Bad for health
 - Readily available
 - Often people's first choice



How do people make choices?

System 1 Automatic

- Fast
- Unconscious
- Effortless



Cued by **associations** and environment around us
EXTERNALLY DRIVEN



System 2 Reflective

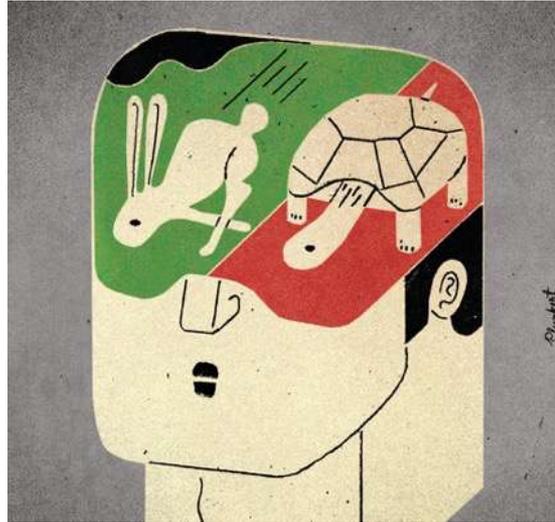
- Slow
- Conscious
- Effortful

Taking in **information**, pursuing goals, making decisions
INTERNALLY DRIVEN

What does this mean for changing choice?

Target System 1

Make healthy options more **visible, available,** etc while reducing temptation from unhealthy choices



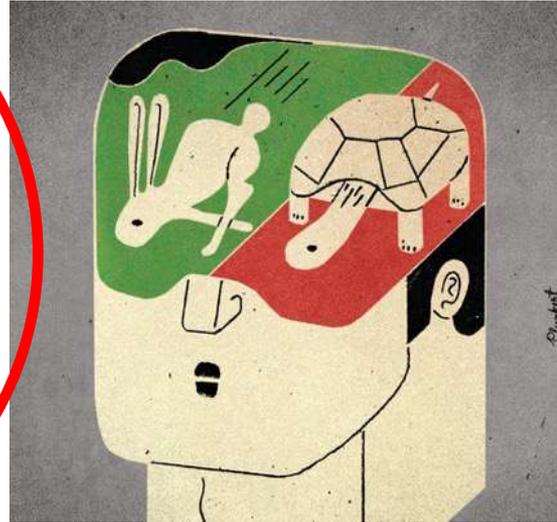
Target System 2

Educate people about *how* and *why* to do X, convey risk of doing Y and **motivate** action

What does this mean for changing choice?

Target System 1

Make healthy options more **visible, available**, etc while reducing temptation from unhealthy choices



Target System 2

~~Educate~~ people about *how* and *why* to do X, convey risk of doing Y and **motivate** action

Simplify choices to make it easier for System 2

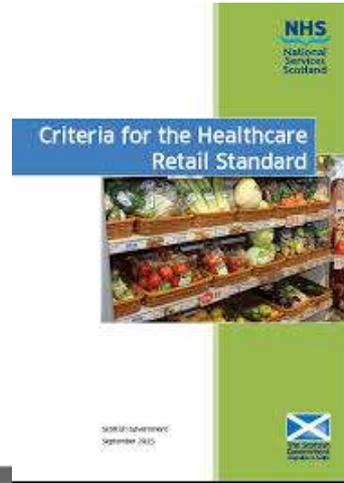
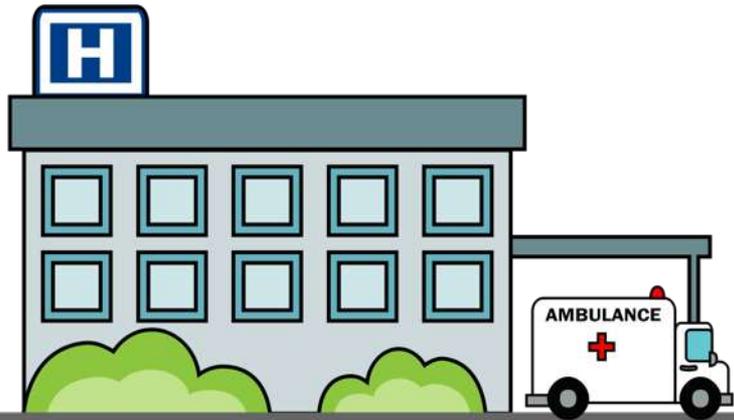
Two projects

1. Changing snack availability
2. Simplifying healthy choices

Availability

Availability in Scottish Hospitals

Healthcare Retail Standard launched in 2015 specifying that at least 50% of food products available for sale in hospitals should meet enhanced nutritional standards



Audit

Checked all snacks available in food retail units (n=76) in NHS premises in Aberdeen

- shops,
- cafes/canteens,
- vending machines

Data: Collected info on all snack foods available and those purchased over 4 weeks from the 4 largest sites (27,989 purchases)



Audit: Results

533 different snack foods available

Most (376) = single-serve items

Importantly: only 27% of single serve snacks = healthy items

So not 50:50 if you were shopping within that category



Audit: Results

		SNACKS  
Kcals		18–641 kcals per item
Fat		0g – 39g per item
Sugar		0.1g – 76g per item
Salt		0g – 2.9 per item

Many really unhealthy options remain

Of top 20 selling products, only 5 were healthy

So is offering 50% healthy options enough?

Changing % Availability

Experiment

- Online choice experiment
- 159 participants
- Showed them ranges with;
 - 25% healthy options
 - 50% healthy options
 - 75% healthy options

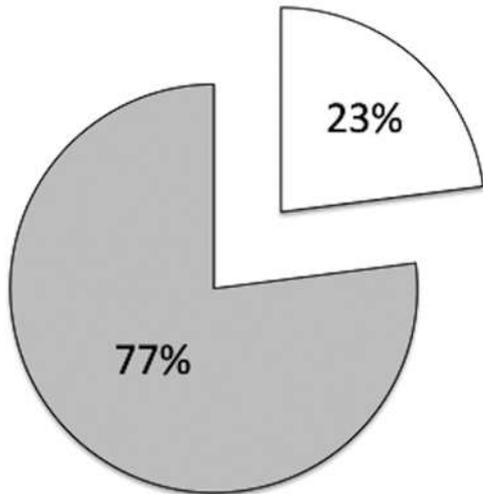


“Click on the snack you would buy if presented with this selection in real life”

Experiment: Results

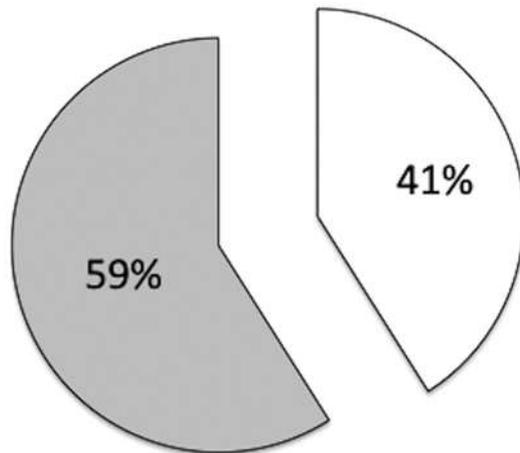
Availability was significantly associated with choice

25% Minority Healthy



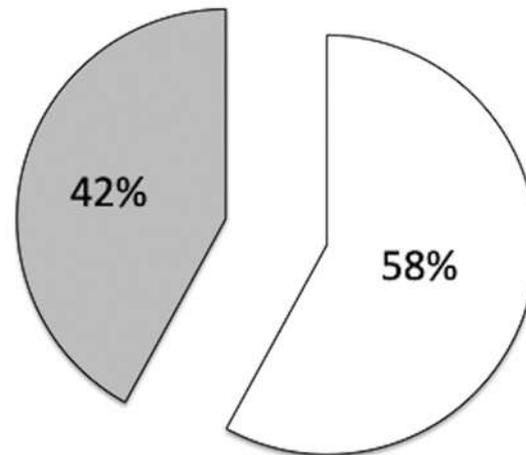
- Predominantly Healthy Choices
- Predominantly Unhealthy Choices

50% Equivalent



- Predominantly Healthy Choices
- Predominantly Unhealthy Choices

75% Majority Healthy



- Predominantly Healthy Choices
- Predominantly Unhealthy Choices

Experiment: Discussion

Even when the clear majority (75%) of the available options were healthy, lots of people still chose unhealthy options

(ditto audit)

What next?





Point of purchase prompts

Enabling healthier snack choices in hospital

shops: a randomised controlled trial of a cognitively informed point of purchase prompt (PPP)



*The Royal Society
of Edinburgh*

KNOWLEDGE MADE USEFUL



The Intervention: Point of Purchase Prompt (PPP)



Reminds / Prompts health intentions

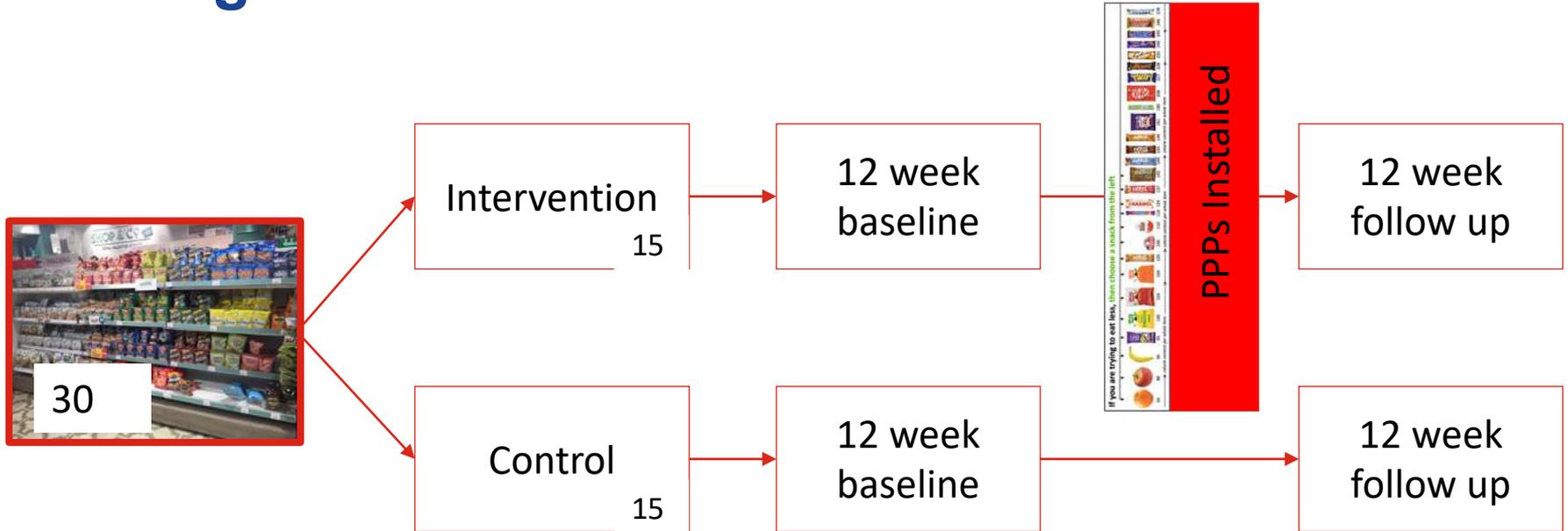
Simplifies info

Displays all info simultaneously so comparisons easy

Makes it easier to identify options that meet ALL goals

Draws attention towards healthy and away from unhealthy items

Testing the PPPs



Design: Cluster RCT, randomising 30 hospital shops in 9 different health boards across Scotland to display PPPs (intervention) or not (control)

Testing the PPPs

Analysed 1,107,087 snack purchases

PPPs had significant beneficial, but very small effect
(~2kcal/1g fat/0.2g sugar /snack)

- Although modest
 - Reasonable as this = average across ALL purchases (many people won't have noticed /been interested)

Conclusions

1. Great strides have been made to improve the availability of healthy snacks in Scottish hospitals – now readily available
2. Consumers continue to buy the remaining unhealthy products and some are really unhealthy.
3. Increasing the availability of healthy products to a clear majority (from 50% to 75%) would be likely to further increase uptake.
4. Point of purchase prompts can help to prompt small positive changes in consumer food choices in hospital shops.

Thanks



Scottish Government
Riaghaltas na h-Alba
gov.scot



ROYAL
VOLUNTARY
SERVICE

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References

AUDIT and CHOICE EXPERIMENT

Allan JL, Duthie S, Heddle M, McKenzie F, Webb S, Johnston M. Healthy snacks in hospitals: Testing the potential effects of changes in availability. *Nutrition and Health*. 2021;27(3):321-327. doi:[10.1177/0260106021996921](https://doi.org/10.1177/0260106021996921)

PPP INTERVENTION

Allan et al (2015). Snack purchasing is healthier when the cognitive demands of choice are reduced: A randomised controlled trial. *Health Psychol* 2015;34:750-755

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