

Changing Human Behaviour Insights from Behavioural Science

Theresa M Marteau

[@MarteauTM](#) tm388@cam.ac.uk

Changing Human Behaviour

I. Changing Minds

II. Changing Environments

III. Changing Minds about Changing Environments to
Change Behaviour

I Changing Minds to Change Behaviour

Less effective



Perception of Threat

Not big enough

Behaviour

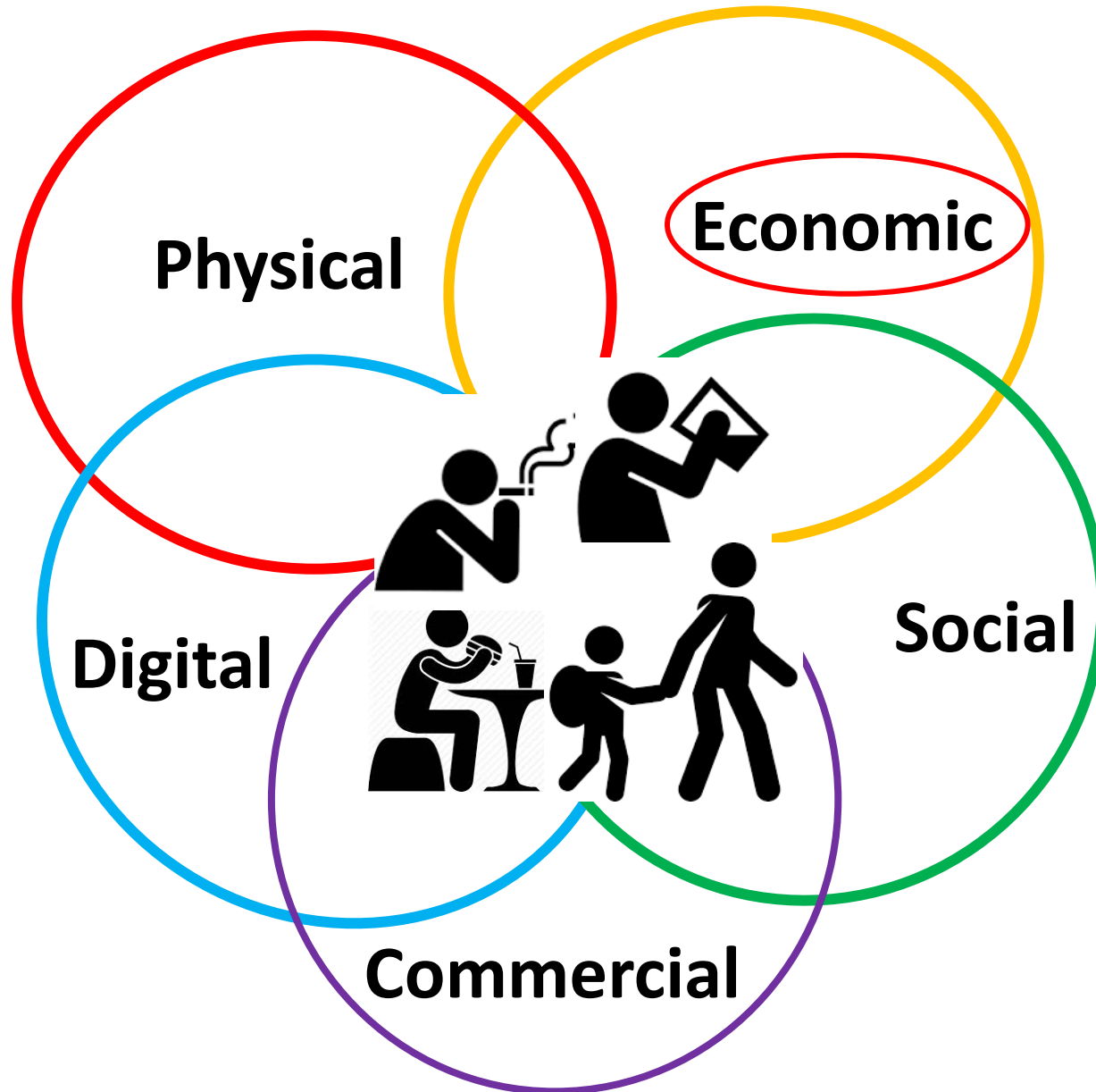
Even if motivated to change

Environments have a strong influence on much of our behaviour

More effective



II Changing Environments to Change Behaviour



Economic Environments

A rapid evidence review of the effectiveness and cost-effectiveness of alcohol control policies: an English perspective

Robyn Burton, Clive Henn, Don Lavoie, Rosanna O'Connor, Clare Perkins, Kate Sweeney, Felix Greaves, Brian Ferguson, Caryl Beynon, Annalisa Belloni, Virginia Musto, John Marsden*, Nick Sheron*

This paper reviews the evidence for the effectiveness and cost-effectiveness of policies to reduce alcohol-related harm.

“While these policies vary in their effectiveness and cost-effectiveness, evidence supports those that reduce the affordability of alcohol as the most effective and cost effective approach to prevention and health improvement.”



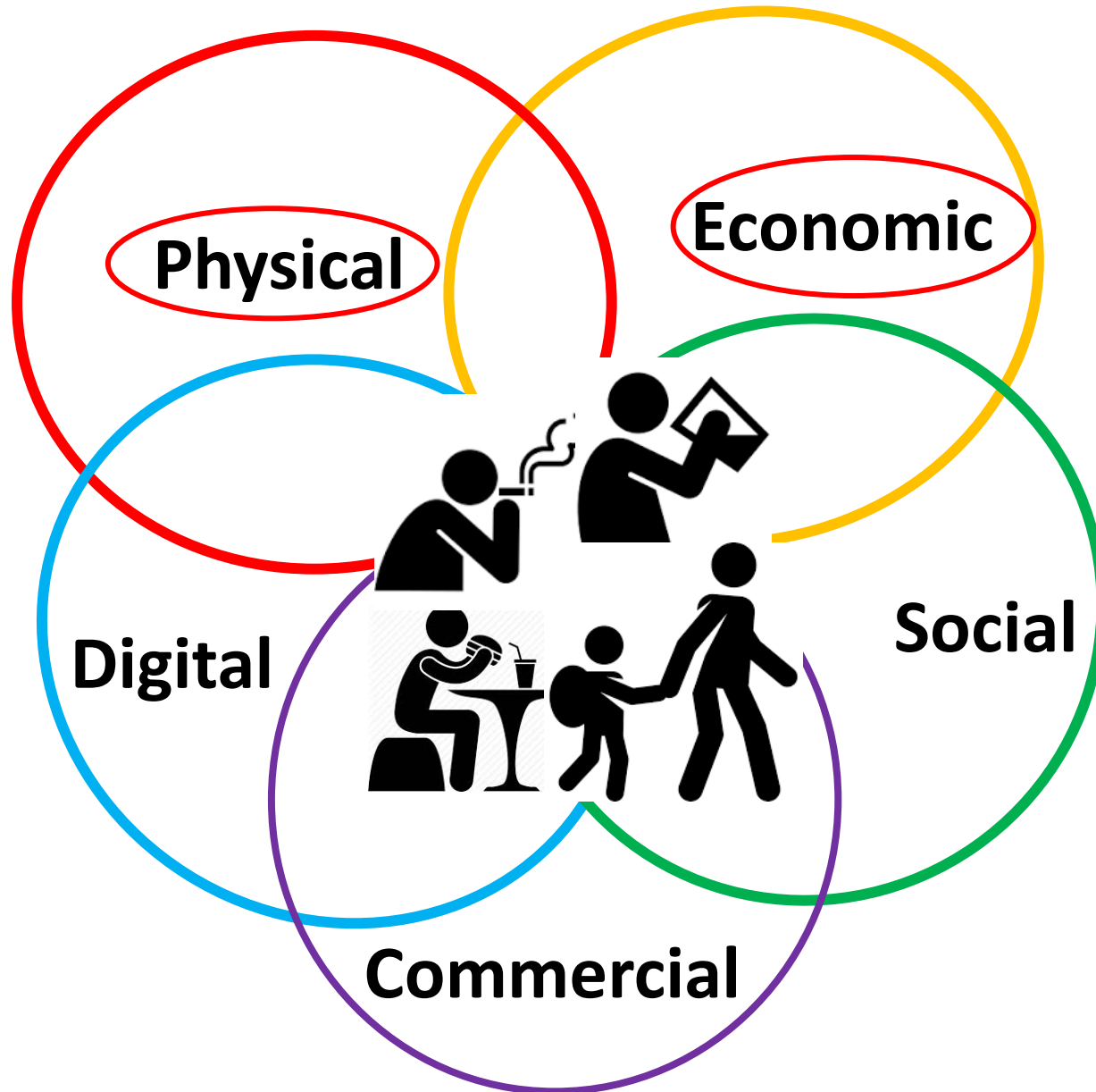
Burton et al Lancet 2016

Health Taxes to Save Lives

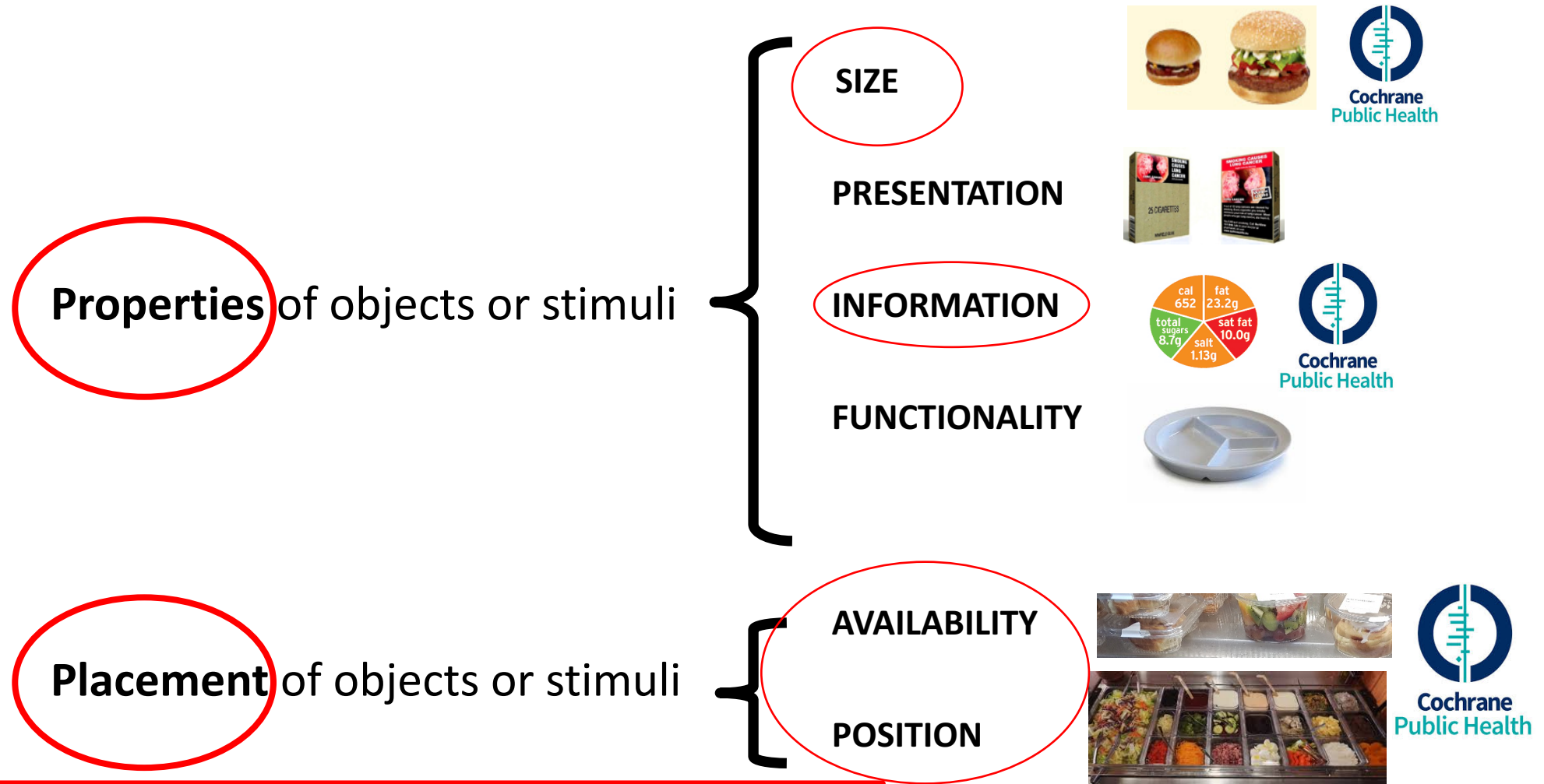
Employing Effective Excise Taxes on Tobacco, Alcohol, and Sugary Beverages

The Task Force on Fiscal Policy for Health
April 2019

II Changing Environments to Change Behaviour

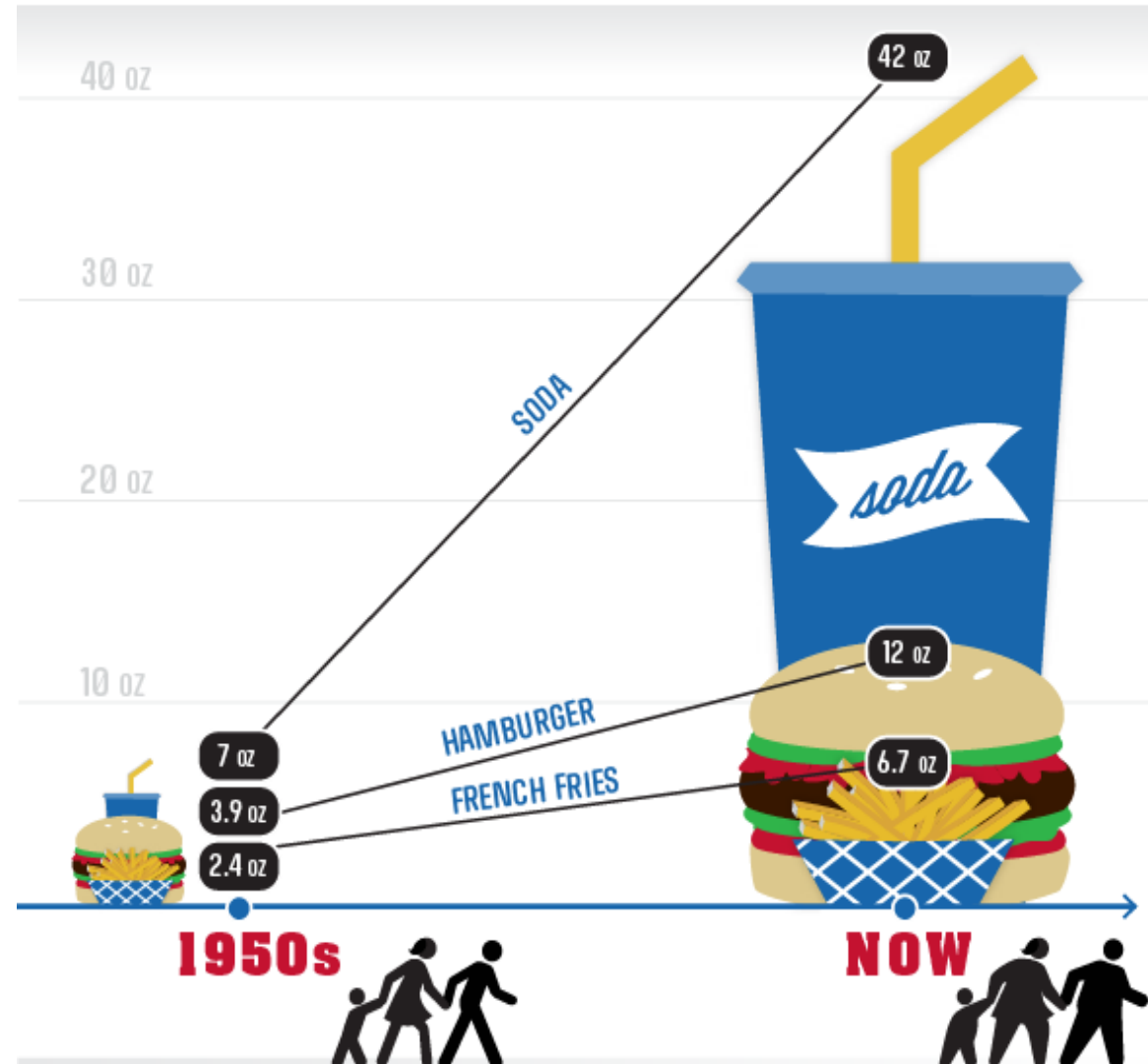


Cues in Physical Environments Shaping Behaviour



Hollands, Bignardi, Johnston, Kelly, Ogilvie, Petticrew, Prestwich, Shemilt, Sutton & Marteau, *Nature Human Behaviour* 2017

Size



Size: Systematic Review

Aim

To estimate the impact of different portion, package or tableware sizes on selection or consumption of:

food

alcohol

tobacco

72 studies

69

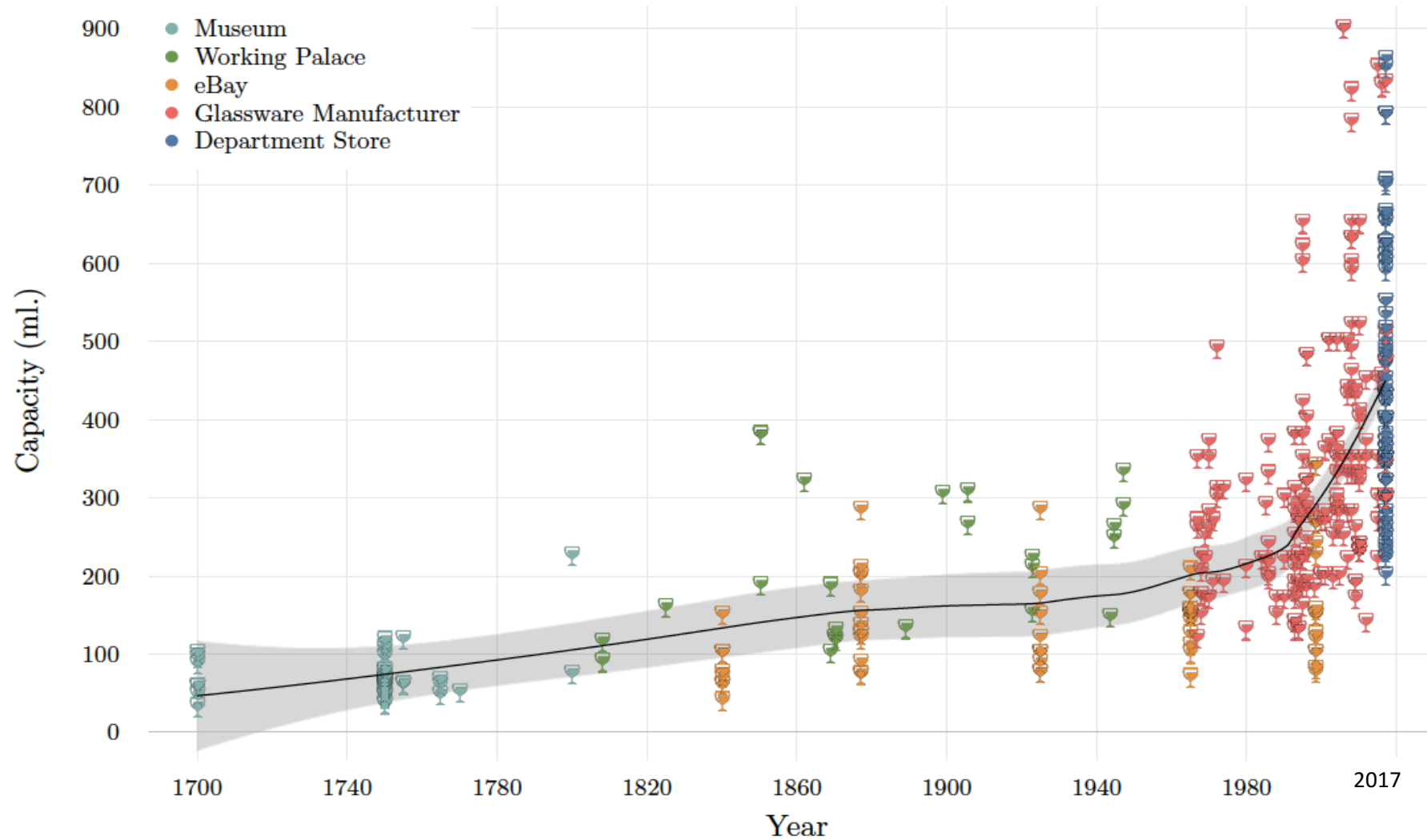
0

3



Size: Effect on alcohol consumption

Wine glass size in England: 1700-2017

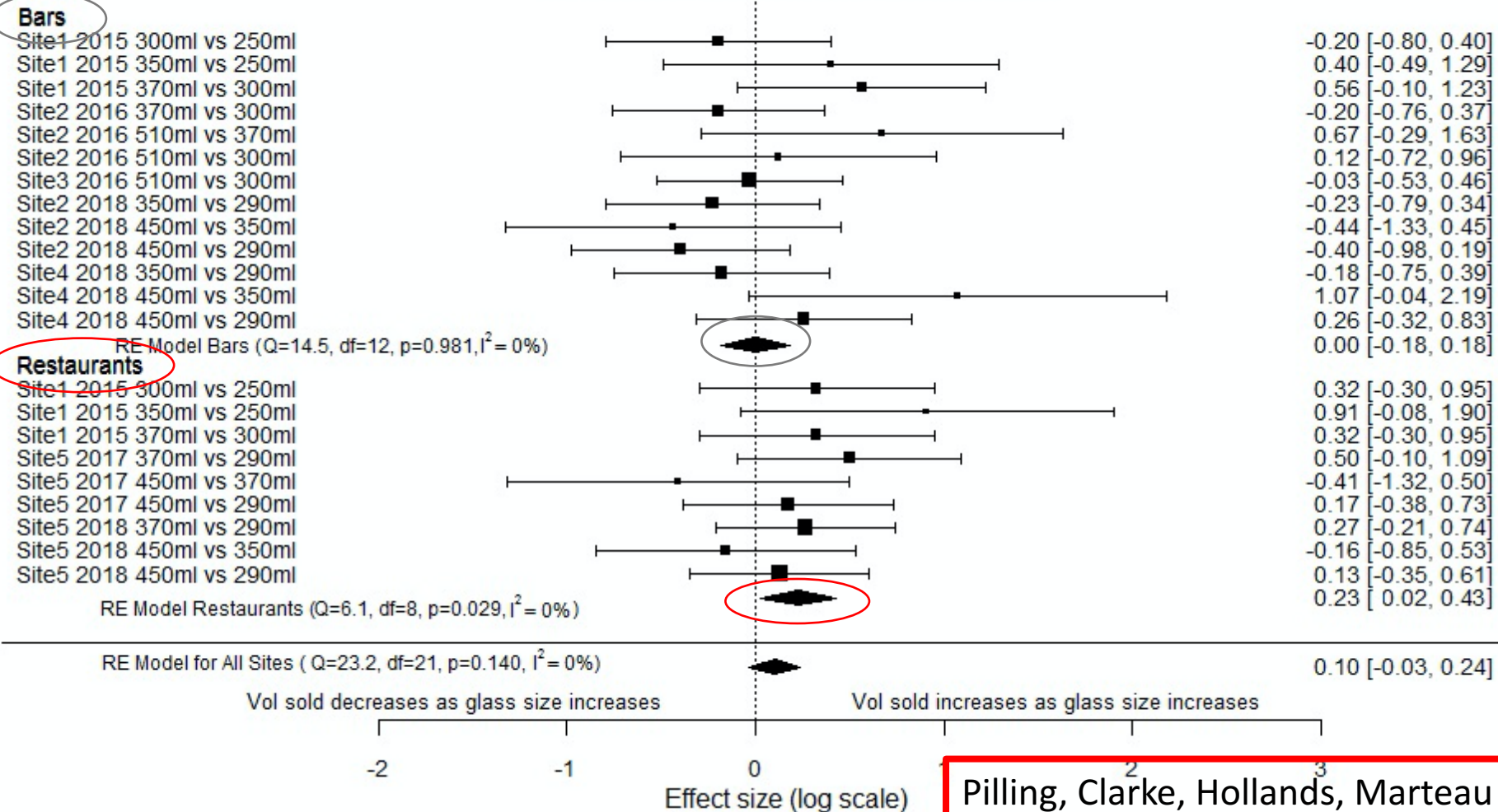


Zupan, Evans, Couturier, Marteau *BMJ* 2017

Wine Glass Size and Wine Sales

Meta-analysis of experimental studies

Overall, adjusted for multiple comparisons
(by venue type, ordered by contrast size)



Wine Bottle Size and Consumption

Impact on in-home consumption
of 75 cl vs 50 cl bottles of wine: An
RCT

Mantzari, Codling, Pechey,
Hollands, Pilling, Marteau *in
progress*



Availability and Alcohol (vs non-Alcohol)

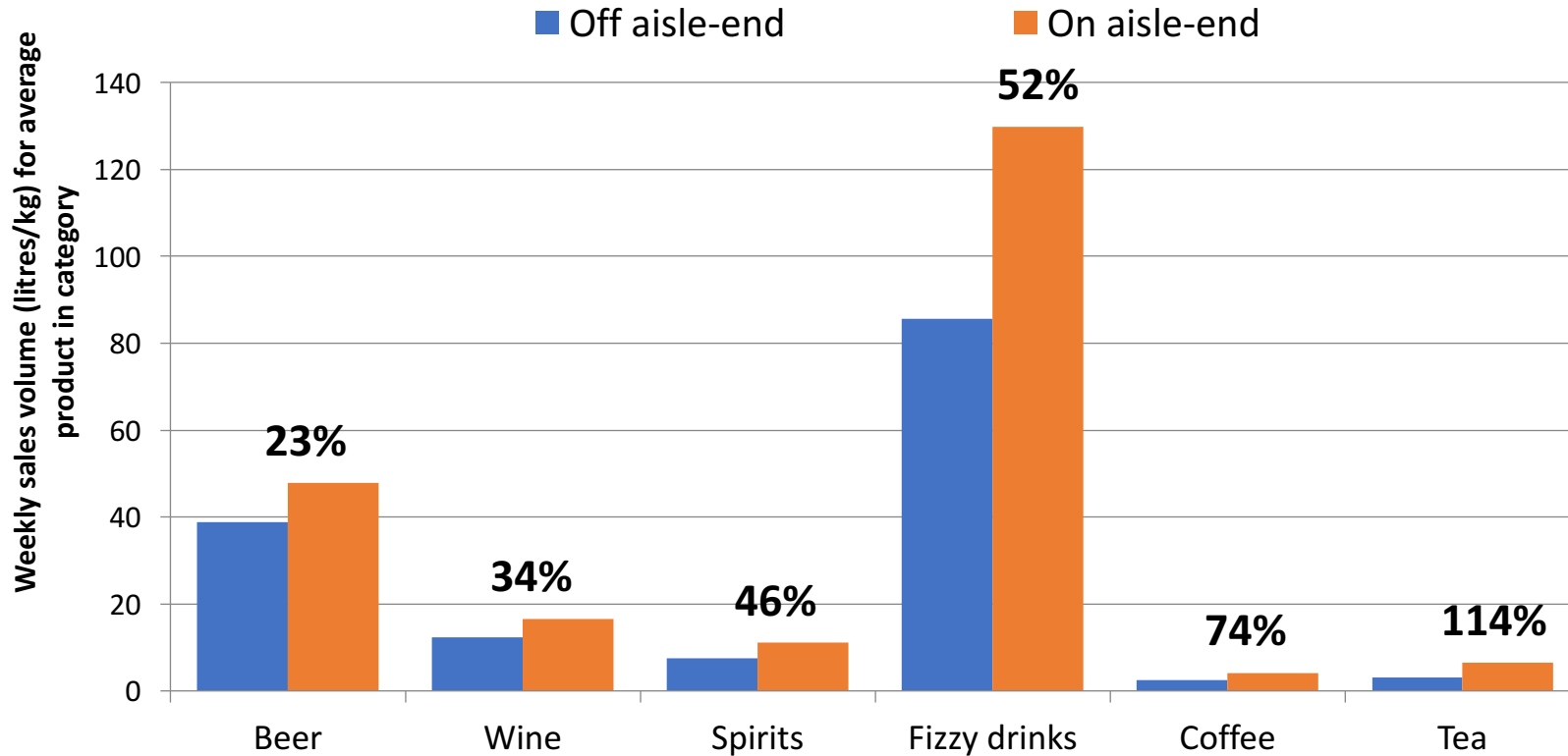


Altering the Availability or Proximity of Food, Alcohol and Tobacco Products to Change their Selection or Consumption (Review)

	Food	Alcohol	Tobacco
Availability	6	0	0
Proximity	18	0	0

Hollands, Carter, Anwer, King, Jebb, Ogilvie, Shemilt, Higgins, Marteau in press

Proximity: Sales on Aisle Ends



Effect sizes equivalent to decrease in price per volume of:

Beer: **4%** (£0.17)

Wine: **6%** (£0.40)

Spirits: **9%** (£1.17)

Fizzy drinks: **22%** (£0.27)

Coffee: **36%** (£0.96)

Tea: **62%** (£1.19)

Information on Labels

RESEARCH REPORT

doi:10.1111/add.13094

Health information on alcoholic beverage containers: has the alcohol industry's pledge in England to improve labelling been met?

Mark Petticrew, Nick Douglas, Cécile Knai, Mary Alison Durand, Elizabeth Eastmure & Nicholas Mays

Policy Innovation Research Unit, Faculty of Public Health and Policy, London School of Hygiene and Tropical Medicine (LSHTM), London, UK

The Observer
Alcohol

I've been honest about alcohol. But the drinks industry hasn't

Adrian Chiles



I still enjoy a drink, but I know the harm it has done me. So why aren't firms doing more to warn of the dangers?

Sat 8 Jun 2019 15.59 BST

Drug and Alcohol REVIEW



Drug and Alcohol Review (March 2018), 37, 293–303
DOI: 10.1111/dar.12596

How alcohol industry organisations mislead the public about alcohol and cancer

MARK PETTICREW¹ , NASON MAANI HESSARI¹ , CÉCILE KNAI¹ & ELISABETE WEIDERPASS^{2,3,4,5}



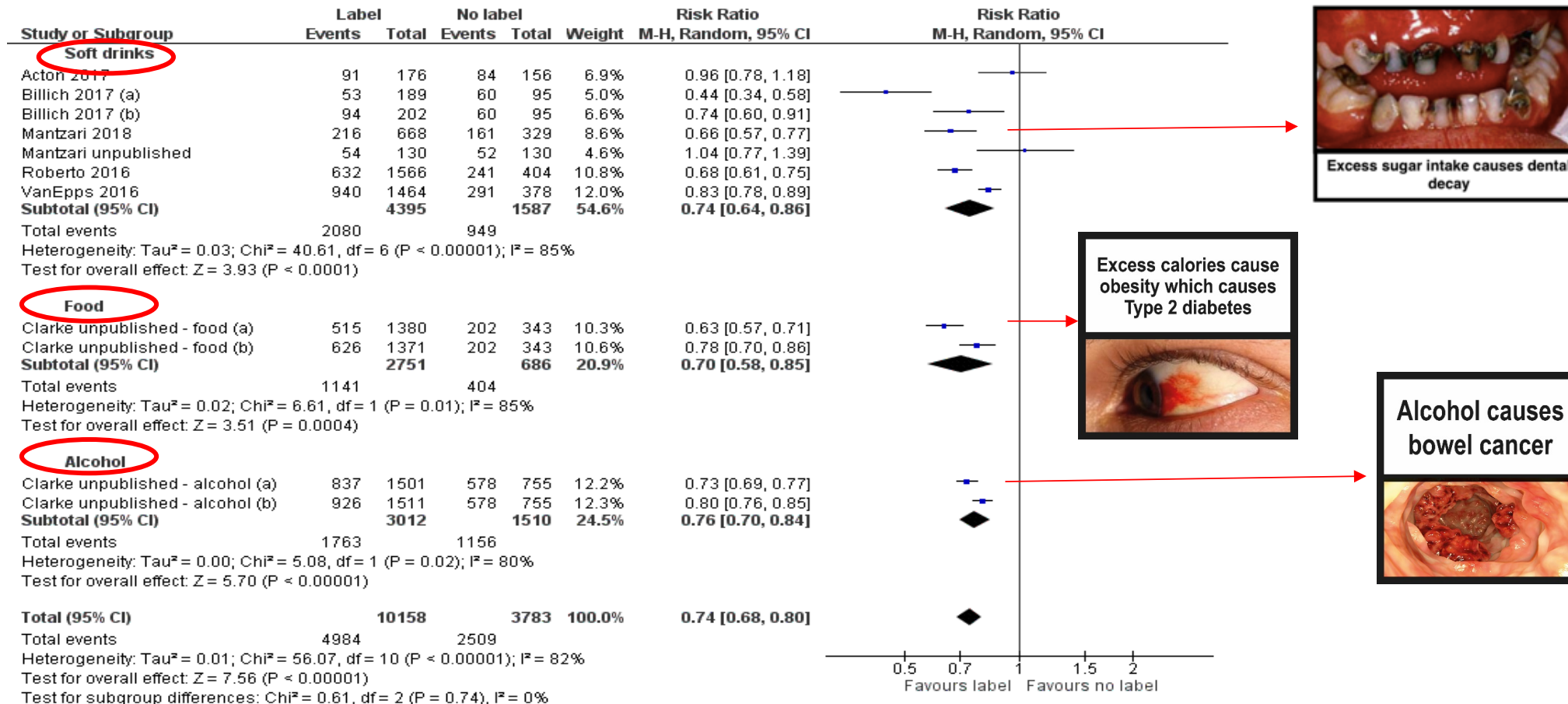
Public Health
England

Protecting and improving the nation's health

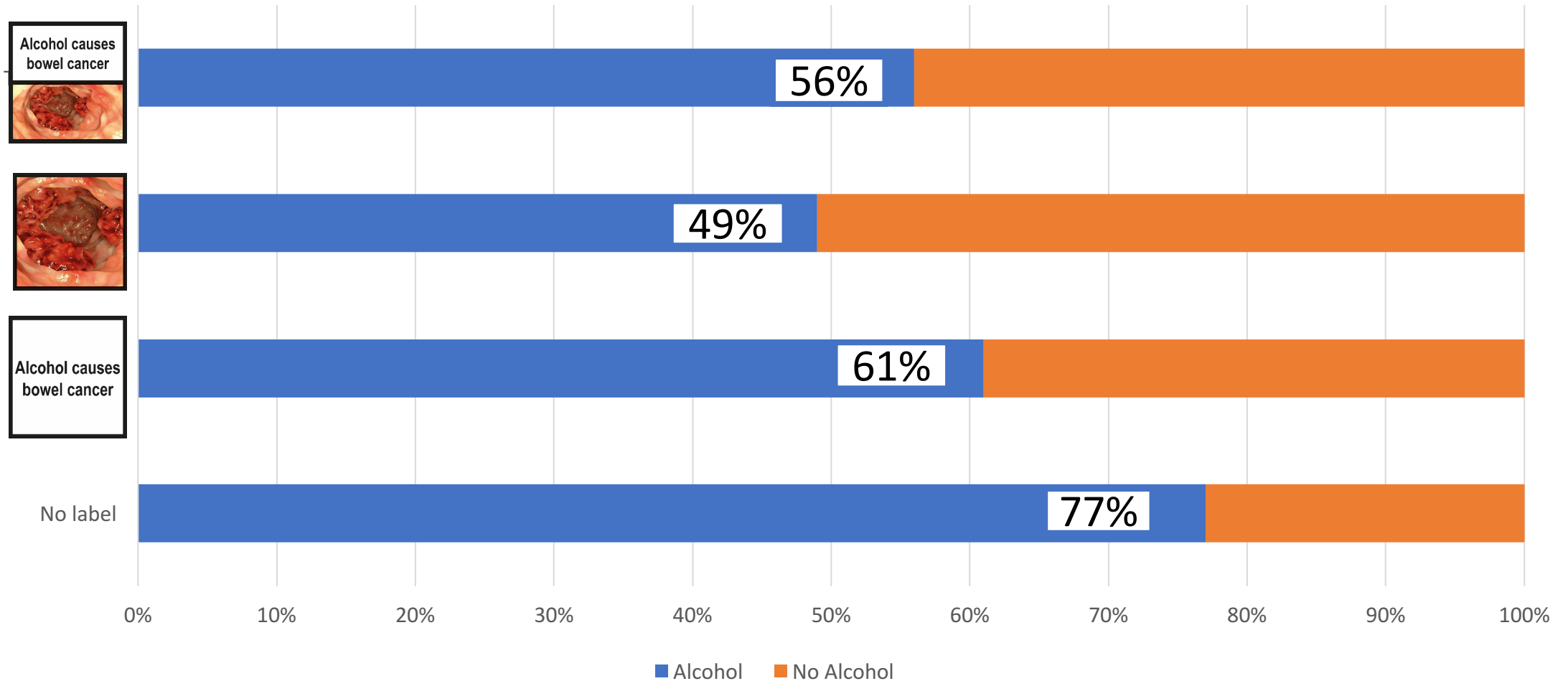
“ Linking alcohol causally with cancer (and other chronic diseases) reliably makes alcohol seem more risky”

Communicating the risks of alcohol consumption: a rapid evidence review
A report commissioned by Public Health England

Impact of Health Warning Labels on Selection: Soft drinks, Food and Alcohol



Impact of labels on selection of an alcoholic drink



Clarke, Pechey, Mantzari, Blackwell, De-Loyde, Morris, Marteau, Hollands *in prep*

Acceptability of Graphic Health Warning Labels on Alcohol

This is a ridiculous level of nanny state behaviour and complete lack of making people take responsibility for their own actions

What next? Don't breathe it's bad for you? Don't live it's bad for you? Don't enjoy your life it's bad for you? F*** Off Nanny State



I do think there should definitely be warnings on alcohol bottles/cans etc. They have them on cigarettes so I think this is no different and may discourage people from drinking too much.

I think anything that can have an adverse effect on your health should have a clear warning on it to give people an informed choice as there is so much marketing to persuade young people that it is safe with no risk

Changing Human Behaviour

I. Changing Minds

II. Changing Environments

III. Changing Minds about Changing Environments to
Change Behaviour

Addressing Policy Inertia

Barriers leading to *Policy Inertia*:

- i. inadequate political leadership and governance to enact policies
- ii. strong opposition to policies by powerful commercial interests
- iii. lack of demand for policy action by the public

The Lancet Commissions

THE LANCET



Milken Institute School
of Public Health
THE GEORGE WASHINGTON UNIVERSITY

The Global Syndemic of Obesity, Undernutrition, and
Climate Change: *The Lancet* Commission report



Swinburn et al *Lancet* 2019

Political Leadership

Population-level Intervention as Punishment



Sajid Javid ✓

@sajidjavid

Follow

I'm backing a fuel duty freeze. Whilst it's critical we target zero-carbon by 2050, hard-working Brits who rely on their cars shouldn't be punished. Glad to support this campaign alongside my colleague [@halfon4harlowMP](#)



Tory leadership contender Sajid Javid vows to freeze fuel duty saving millions...

SAJID Javid today vows to freeze fuel duty for at least two more years – while launching Britain's drive to 'net-zero' emissions. In a huge endorsement of The ...

[thesun.co.uk](#)



WS

FABULOUS

MONEY

MOTORS

TRAVEL

TECH

DEAR DEIDRE

MATT Hancock declared war on the nanny state yesterday by arguing against a booze tax and saying a pint was “perfectly healthy”.

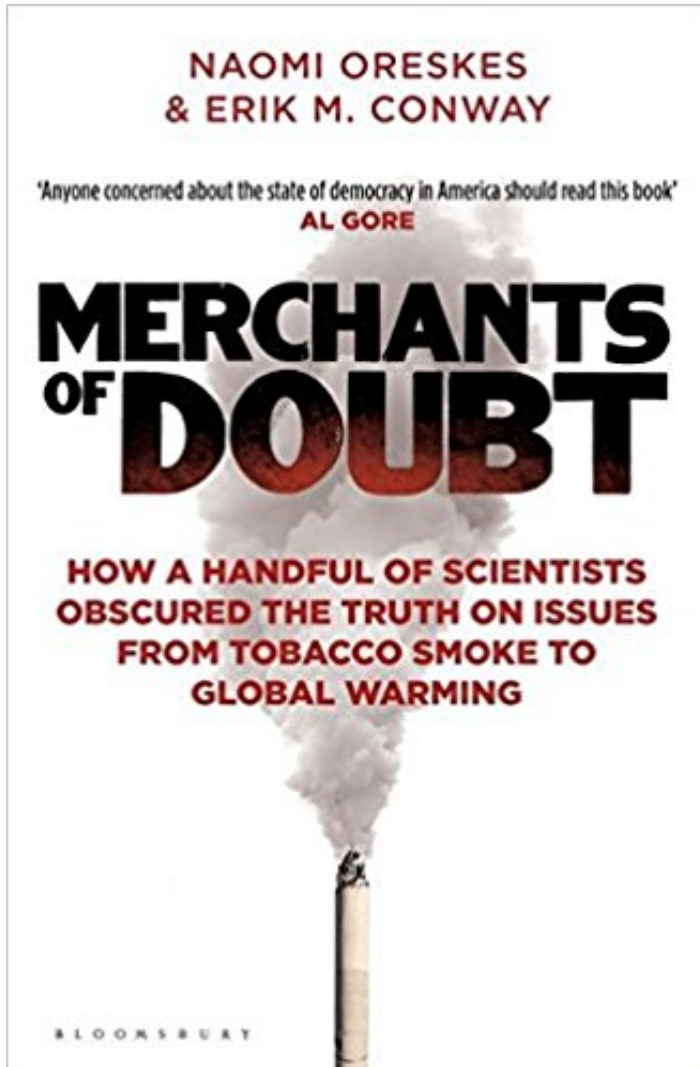
The Health Secretary added that it was time to stop “punishing” everybody by issuing diktats to the entire nation – and to instead target public health messages to those who need it.



Health Secretary Matt Hancock says it is time to stop nannying the British people

Powerful Commercial Interests

Industry responses to interventions to reduce consumption



WHY SHOULD
RESPONSIBLE DRINKERS
PAY MORE?

The text is in white, bold, sans-serif font, arranged in three lines on a black background with a red border.



Public Demand vs. Acceptability

Public acceptability of population-level interventions to change behaviour to improve population health varies by:

- i. behaviour
- ii policy
- iii who is asked
- iv how they are asked

Diepeveen et al. *BMC Public Health* 2013, **13**:756
<http://www.biomedcentral.com/1471-2458/13/756>



RESEARCH ARTICLE

Open Access

Public acceptability of government intervention to change health-related behaviours: a systematic review and narrative synthesis

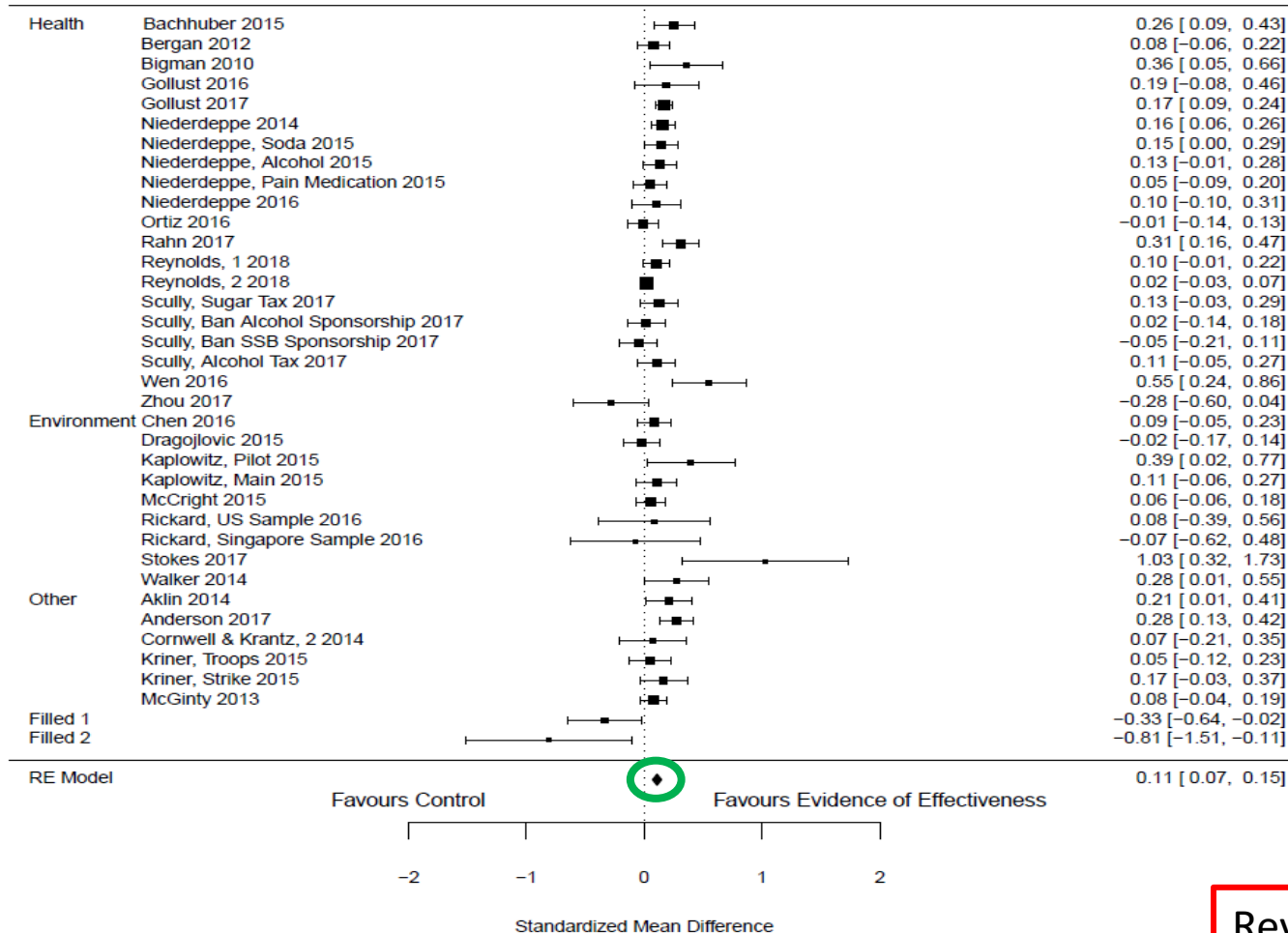
Stephanie Diepeveen¹, Tom Ling¹, Marc Suhrcke^{2,3}, Martin Roland³ and Theresa M Marteau^{3*}

Abstract

Background: Governments can intervene to change health-related behaviours using various measures but are sensitive to public attitudes towards such interventions. This review describes public attitudes towards a range of policy interventions aimed at changing tobacco and alcohol use, diet, and physical activity, and the extent to which these attitudes vary with characteristics of (a) the targeted behaviour (b) the intervention and (c) the respondents.

Public Support and Evidence of Effectiveness

Support for Policy
decreased ← → *increased*



36 Experiments: results pooled

When told or shown **evidence of effectiveness** for policies on Health, Environment or other areas

Support for a policy increased

Estimated increase = 4% (3% to 5%)

SMALLER with competing messages in real world?

Reynolds, Stautz, Pilling, van der Linden, Marteau *under review*

Changing Human Behaviour

- I. Changing Minds to change behaviour
at best, small effects at population level
- II. Changing Environments to change behaviour
largest effects at population level
likely changes minds by changing social norms
- III. Changing Minds of Publics and Politicians about
Changing Environments to Change Behaviour
to achieve benefits of effective and cost-effective
alcohol control policies



@MarteauTM tm388@cam.ac.uk

