# Does altering the serving sizes of beer and wine in pubs, bars and restaurants affect alcohol consumption?

Submission date

Recruitment status

[X] Prospectively registered

07/09/2021

No longer recruiting

[X] Protocol

Registration date

Overall study status

[X] Statistical analysis plan

08/09/2021

Completed

[X] Results

**Last Edited** 

Condition category

19/01/2024 Oral Health

[X] Individual participant data

#### Plain English summary of protocol

Background and study aims

There is has been little research on whether selling smaller portions of alcoholic drinks in pubs and bars reduces the total amount consumed. This study aims to investigate whether adding a two-third pint option for beer and cider sold on tap or removing the largest serving size for a glass of wine reduces the amount that is drunk.

#### Who can participate?

Licensed premises that offer beer and/or wine and are willing to change the serving sizes of beer and/or wine that they offer.

#### What does the study involve?

Licensed premises who agree to introduce a 2/3 pint serving size for all of the beer, cider and ale available on tap will do so for a period of 4 weeks. Premises will also be asked to inform customers of the 2/3 pints option by putting signs up. Licensed premises who agree to remove the 250-ml serving for glasses of wine will do so for a period of 4 weeks. Premises will be asked to remove mention of the 250-ml serving from menus and signs as necessary. Sales data will be collected from bars for a period of 12 weeks, covering 4 weeks of baseline business as usual, 4 weeks of the intervention and 4 weeks of going back to business as usual.

## What are the possible benefits and risks of participating?

A possible benefit of participating is the opportunity to contribute to a better understanding of how the serving sizes of beer and wine affect sales. Student bars could also contribute to the NUS initiative 'Alcohol Impact' for safe drinking in students. Licensed premises may benefit from publicity in taking part in this research once the results have been published, but can choose to stay anonymous if they wish. There is no change for the customers except the serving sizes, so there is no risk or benefit to visiting premises participating in the study.

Where is the study run from? Institute of Public Health, University of Cambridge (UK)

When is the study starting and how long is it expected to run for? September 2021 to May 2022

Who is funding the study? The Wellcome Trust (UK)

Who is the main contact? Professor Theresa Marteau, tm388@medschl.cam.ac.uk

## Contact information

#### Type(s)

Scientific

#### Contact name

Prof Theresa Marteau

#### **ORCID ID**

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## Additional identifiers

## **EudraCT/CTIS** number

Nil known

**IRAS** number

## ClinicalTrials.gov number

Nil known

## Secondary identifying numbers

WT 206853/Z/17/Z

# Study information

#### Scientific Title

The impact of altering serving sizes of beer and wine on alcohol consumption: a field study

## Study objectives

- 1. Introducing the option for two-thirds of a pint for beer and cider reduces the amount of beer and cider sold.
- 2. Removing the largest available serving of a glass of wine (250 ml or 175 ml) reduces the amount of wine sold.

#### Ethics approval required

Old ethics approval format

#### Ethics approval(s)

Approved 02/08/2019, Psychology Research Ethics Committee of the University of Cambridge (School of the Biological Sciences, 17 Mill Lane, Cambridge, CB2 1RX; +44 (0)1223 766876; cheryl. torbett@admin.cam.ac.uk), ref: PRE.2019.035

#### Study design

Interventional cross-over study

#### Primary study design

Interventional

## Secondary study design

Cross-over study

#### Study setting(s)

Community

#### Study type(s)

Prevention

#### Participant information sheet

Not available in web format, please use the contact details to request a patient information sheet.

## Health condition(s) or problem(s) studied

Excessive alcohol consumption

#### **Interventions**

Intervention 1: Adding a two-thirds pint serving size Sites will add a two-thirds pint serving size for all beers and ciders available on tap. The two-thirds pint will be offered in addition to the existing one pint and half-pint serving sizes, with proportionate pricing as far as is possible i.e. with a price which is linear-by-volume between the pint and half-pint sizes. Sites will choose two-thirds pint glasses to fit with their existing glassware, to be provided by the researchers. Bars will be allowed to keep the glassware after the study.

As part of the intervention, sites will adopt a range of strategies in keeping with their existing practices to draw customers' attention to the new two-thirds pint option, including information on menus, signs behind the bar and prompting by bar staff when customers are ordering their drink. These practices will be described but not controlled.

Intervention 2: Removing the largest serving size for glasses of wine Sites will reduce their range of serving sizes for glasses of wine by removing the largest serving size for a glass of wine in their existing range. This will either be 250 ml or 175 ml, with 125 ml sizes always available in

keeping with current regulations for selling alcohol in licensed premises. Menus and signage will be updated to reflect this change.

The study has a treatment reversal design with three consecutive 4-week periods as follows: ABA, where A represents the baseline periods during which standard serving sizes will be served and B represents the intervention periods in which the range of serving sizes will be modified Sites agreeing to implement both interventions will first complete intervention 1 followed by intervention 2 or vice versa.

#### Intervention Type

Behavioural

#### Primary outcome measure

Intervention 1: Daily volume (in ml) of beer and cider purchased (including on tap, bottle, or can), measured using electronic records of sales

Intervention 2: Daily volume (in ml) of wine sold (including by the glass, bottle, and carafe), measured using electronic records of sales.

Sales will be recorded for 12 weeks, including 4 weeks of business as usual before the intervention, 4 weeks of the intervention, and 4 weeks going back to business as usual after the intervention.

#### Secondary outcome measures

- 1. Daily volume of beer and cider sold by serving size (pint,  $\frac{1}{2}$  pint,  $\frac{2}{3}$  pint, bottle sizes, can sizes) measured using electronic records of sales
- 2. Daily volume of wine purchased by serving size (125 ml, 175 ml, 250 ml, carafe, 750 ml bottle) measured using electronic records of sales
- 3. Daily volume of alcohol sold excluding beer and cider (during intervention 1) or wine (during intervention 2) measured using electronic records of sales
- 4. Daily revenue from food and alcoholic and non-alcoholic drink measured using electronic records of sales
- 5. Daily number of transactions measured using electronic records of sales
- 6. Daily amount of beer and cider (during intervention 1) or wine (during intervention 2) sold in units of alcohol (in cases where it is practical to extract this information from electronic sales data) measured using electronic records of sales

#### Additional measures

For sites implementing Intervention 2, the capacity of their usual wine glasses will be recorded.

## Overall study start date

13/09/2021

## Completion date

08/05/2022

# **Eligibility**

## Key inclusion criteria

Participants will be individual public houses and bars.

- 1. Sell beer (and/or cider) on tap in sizes larger than two-thirds of a pint (Intervention 1)
- 2. Sell a minimum of 150 pints of beer and/or cider on average per week (Intervention 1)
- 3. Willing to introduce a two-thirds pint serving size for all beer and cider available on tap at a

proportionate price (Intervention 1)

- 4. Sell wine by the glass in serving sizes greater than 125ml (i.e. 175ml or 250ml) (Intervention 2)
- 5. Sell a minimum of 100 glasses of wine on average per week (Intervention 2)
- 6. Willing to cap the serving size of a glass of wine (Intervention 2)
- 7. Have an electronic point of sale (EPOS) till system to record daily sales of all drinks and their served sizes.
- 8. Are primarily indoor, permanent establishments in a fixed location; i.e. not purposefully temporary or time-limited (e.g. pop-up), or mobile venues (e.g. vans)

#### Participant type(s)

Healthy volunteer

#### Age group

Adult

#### Sex

Both

#### Target number of participants

Customers of 19 licensed premises

## Total final enrolment

39

#### Key exclusion criteria

Does not meet inclusion criteria

#### Date of first enrolment

13/09/2021

#### Date of final enrolment

01/02/2022

## Locations

#### Countries of recruitment

England

Northern Ireland

Scotland

United Kingdom

Wales

Study participating centre Institute of Public Health University of Cambridge Robinson Way

# Sponsor information

#### Organisation

University of Cambridge

#### Sponsor details

Cambridge Research Office 16 Mill Lane Cambridge England United Kingdom CB2 0SR +44 (0)12237766362 Jo.Dekkers@admin.cam.ac.uk

#### Sponsor type

University/education

#### Website

https://www.research-operations.admin.cam.ac.uk/about-us/contact-us

#### **ROR**

https://ror.org/013meh722

# Funder(s)

#### Funder type

Charity

#### **Funder Name**

Wellcome Trust

#### Alternative Name(s)

Wellcome, WT

#### **Funding Body Type**

Private sector organisation

#### **Funding Body Subtype**

Trusts, charities, foundations (both public and private)

#### Location

United Kingdom

## **Results and Publications**

#### Publication and dissemination plan

The findings from this study will be published in at least one scientific journal in 2022 and made available open access. They will also be presented at one or more scientific meetings. The data will be made available for sharing via the University of Cambridge Research Data Repository or Open Science Framework online data repository once the findings have been published.

#### Intention to publish date

30/12/2022

#### Individual participant data (IPD) sharing plan

The study will not use individual-level data: the unit of randomisation, data collection and analysis will be individual public houses and bars. The datasets generated and/or analysed during the current study will be stored in a publicly available repository. All study data will be anonymised using a unique numeric identifier. At the appropriate time, the anonymous study datasheet will be locked and deposited on the University of Cambridge Data Repository. If a publican decides that they do not want their data to be used after their participation they have the right to request that their data are withdrawn from the study. They can request this up to two weeks after study completion. Publicans are made aware of this prior to giving consent to their participation in the study and to the use of their anonymised study data.

## IPD sharing plan summary

Stored in repository

#### **Study outputs**

Output type	<b>Details</b> version 2	Date created	Date added	Peer reviewed?	Patient-facing?
Protocol file		07/09/2021	08/09/2021	No	No
<u>Dataset</u>		09/03/2023	27/06/2023	No	No
Results article		26/06/2023	27/06/2023	Yes	No
Statistical Analysis Plan		23/05/2023	27/06/2023	No	No
Results article		18/01/2024	19/01/2024	Yes	No