



Behavioral Science Insights for Public Health

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**Heuristics &
Biases**



**Thinking
Fast**



**Thinking
Slow**

Nutrition Facts

8 servings per container

Serving size 2/3 cup (55g)

Amount per serving

Calories 230

% Daily Value*

Total Fat 8g 10%

Saturated Fat 1g 5%

Trans Fat 0g

Cholesterol 0mg 0%

Sodium 160mg 7%

Total Carbohydrate 37g 13%

Dietary Fiber 4g 14%

Total Sugars 12g

Includes 10g Added Sugars 20%

Protein 3g

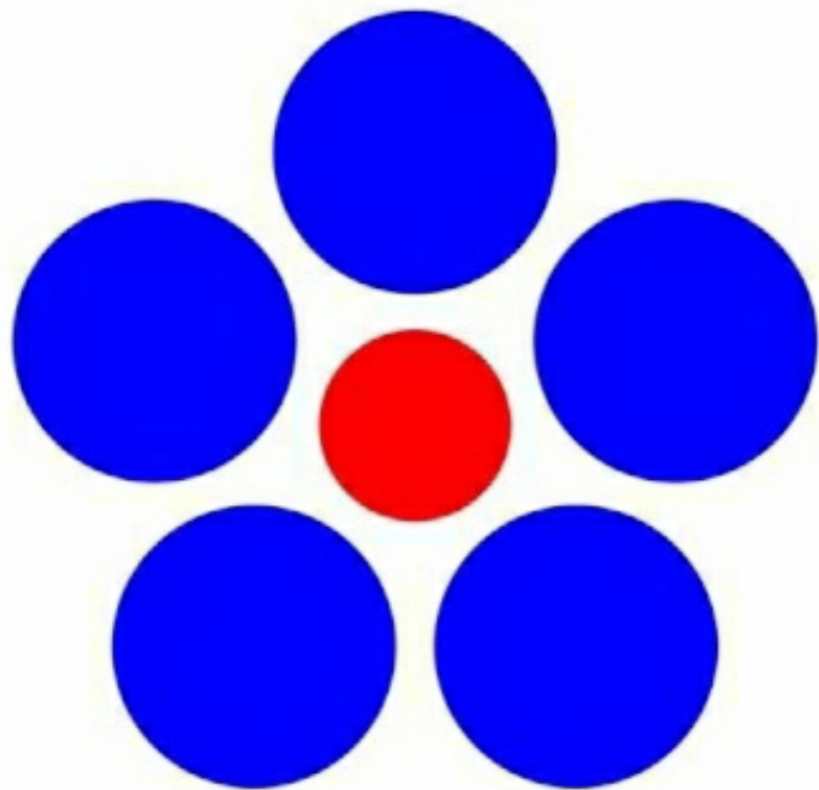
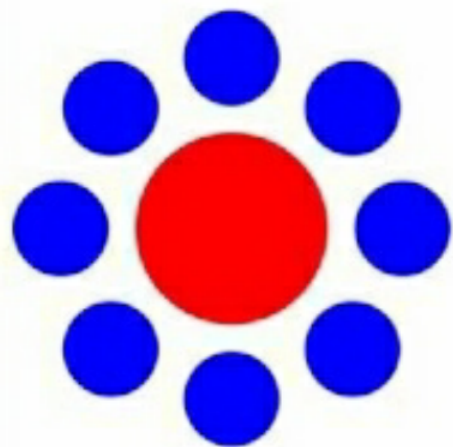
Vitamin D 2mcg 10%

Calcium 260mg 20%

Iron 8mg 45%

Potassium 235mg 6%

* The % Daily Value (DV) tells you how much a nutrient in a serving of food contributes to a daily diet. 2,000 calories a day is used for general nutrition advice.





Nudge



**Choice
context
matters**



**Does not
abridge
freedom**



**No change
in economic
incentive**



TODAY'S TALK

- Behavioral economics & psychology
- Choice architecture
- Simplifying communication
- Social Norms
- Defaults



Choice Architecture & Simplifying Communication



**Over 6000
employees/visitors**



**Register data for
9 months**



**Traffic Lights +
Choice
Architecture**



“Consume often”



“Consume less often”

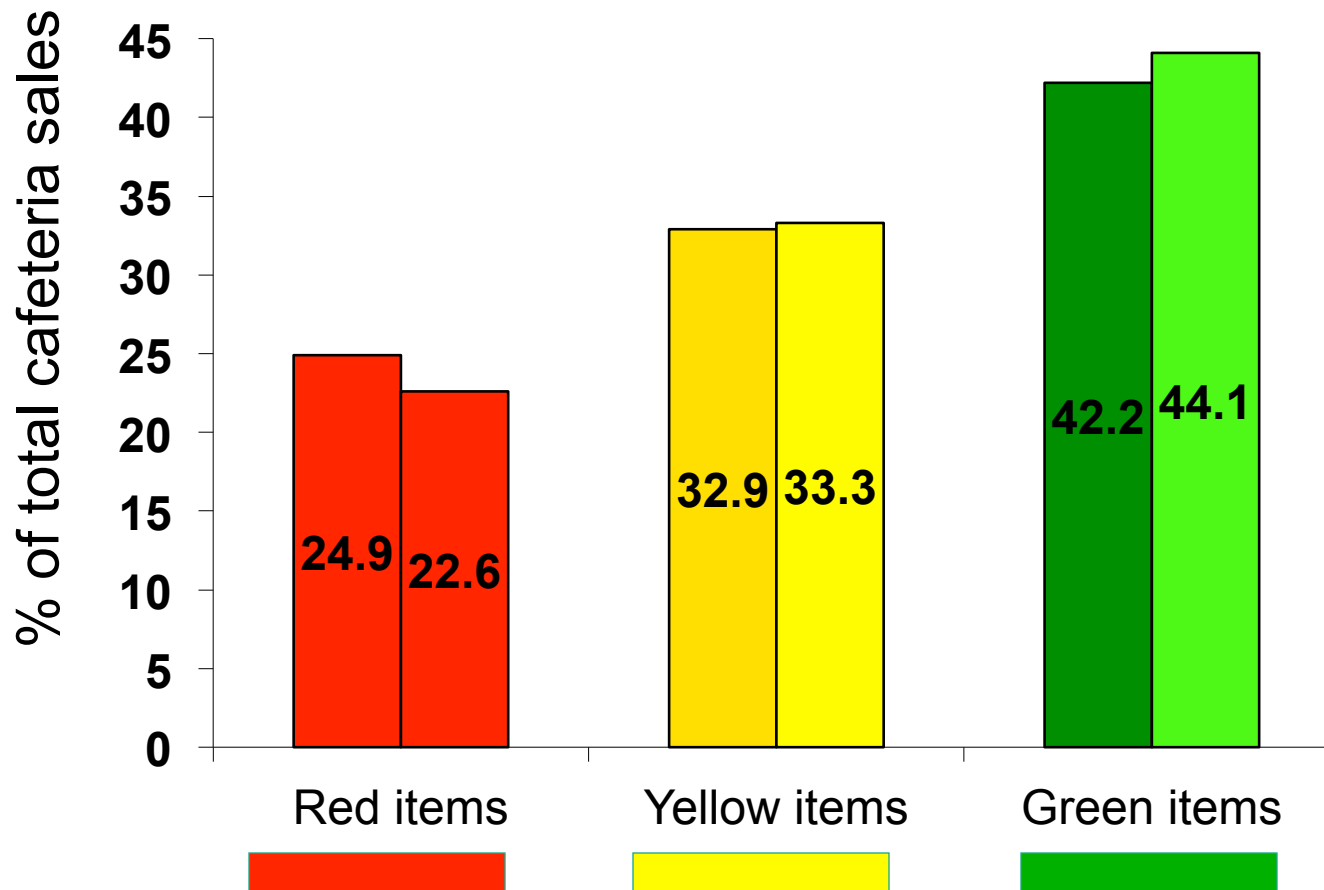


“There’s a better choice in
green or yellow”

Choice Architecture



Sales of all cafeteria items during baseline and labeling



Choice Architecture



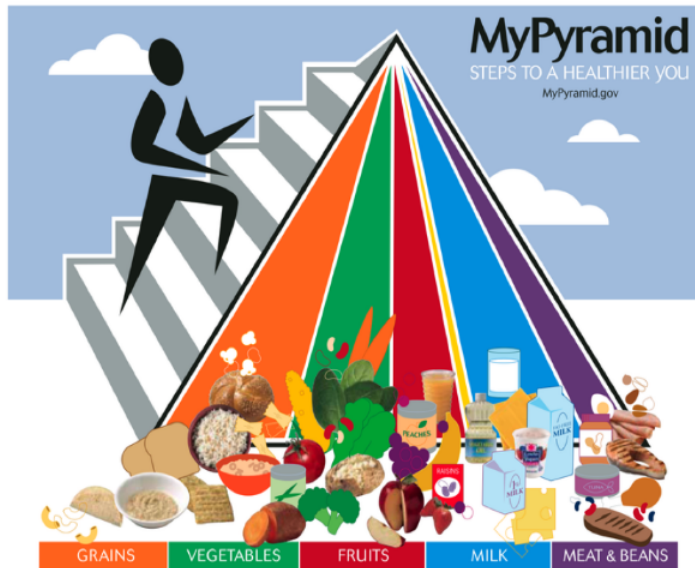
Water = 14% of all cold
beverage sales



**Google moved
M&Ms to opaque
containers**

**3.1 million fewer
M&Ms eaten
by 2000 employees
over 7 weeks**

Memorable & Actionable Guidelines



Simplifying Communication



Social Norms

- How others act in a given situation
- Other people signal what do to & what is appropriate



U.K. Organ Donation Study



1,085,000
visitors to
vehicle
tax/license
website
June - July
2013



Messages to
join organ donor
registry

8


Randomize
to
webpages

Control

GOV.UK

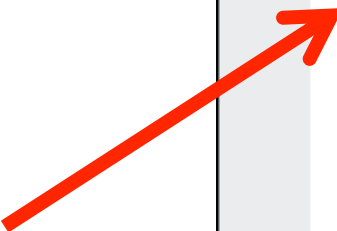
Home

Service

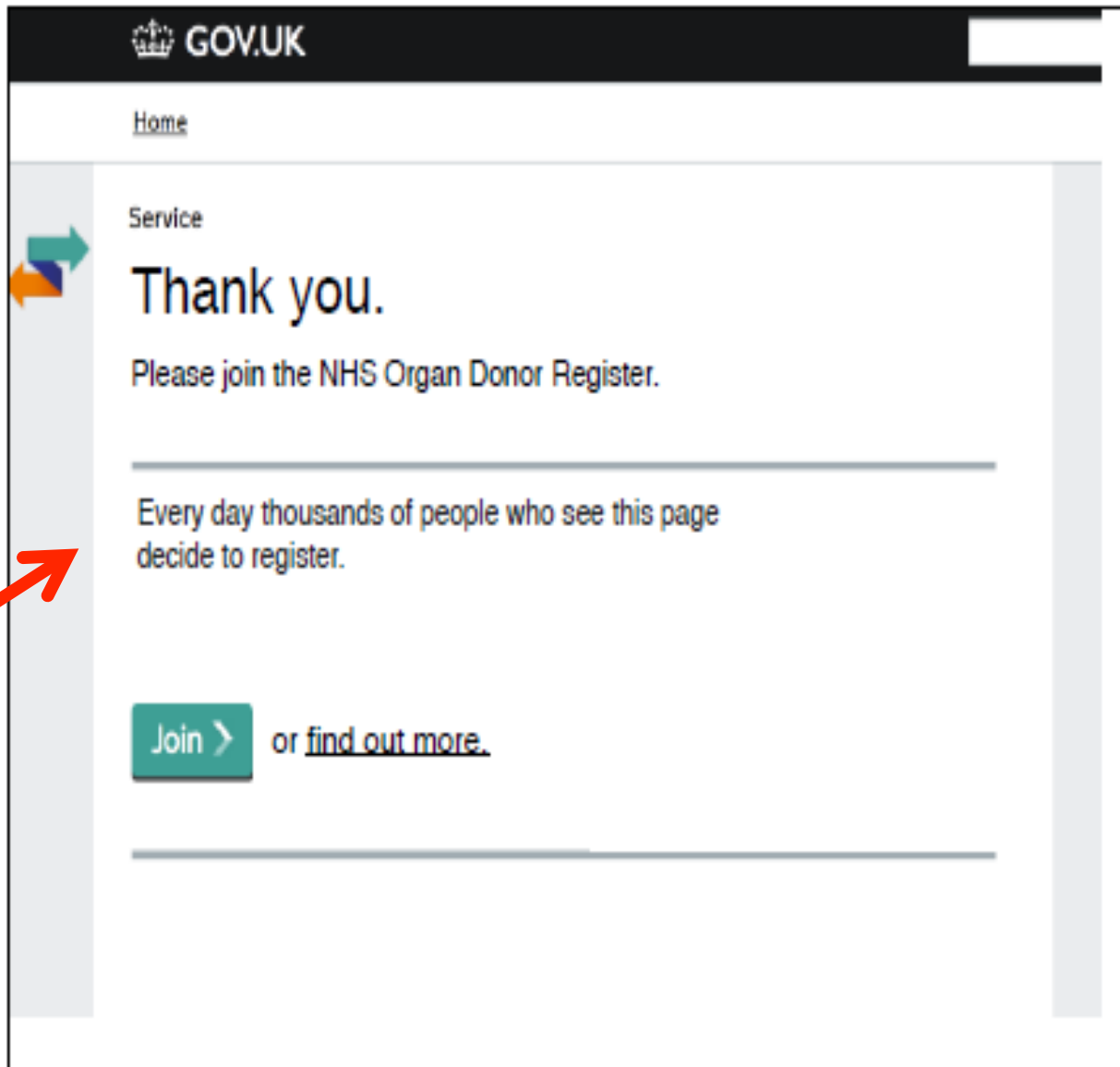
 Thank you.

Please join the NHS Organ Donor Register.

[Join >](#) or [find out more.](#)




Social Norms



GOV.UK

[Home](#)

Service

 **Thank you.**

Please join the NHS Organ Donor Register.

Every day thousands of people who see this page decide to register.

[Join >](#) or [find out more.](#)

Norm & Picture - Saliency

The image shows a screenshot of a GOV.UK webpage. At the top left is the GOV.UK logo. Below it is a navigation bar with the word "Home". The main content area is titled "Service" and features a "Thank you." message. Below this is the text "Please join the NHS Organ Donor Register." A horizontal line separates this from the next section, which contains the text "Every day thousands of people who see this page decide to register." To the right of this text is a photograph of a diverse group of people. Below the text and photo is a green button labeled "Join >" followed by the text "or [find out more.](#)". Two red arrows are overlaid on the image: one points from the left margin towards the text "Every day thousands of people who see this page decide to register.", and the other points from the right margin towards the photograph of the group of people.

GOV.UK

Home

Service

Thank you.

Please join the NHS Organ Donor Register.

Every day thousands of people who see this page decide to register.

Join > or [find out more.](#)

Norm & Logo - Saliency

The image shows a screenshot of the NHS Organ Donor Register website. At the top, the GOV.UK logo is visible. Below it, the text 'Home' is displayed. The main content area features a 'Service' section with a 'Thank you.' message and a request to 'Please join the NHS Organ Donor Register.' A horizontal line separates this from a paragraph: 'Every day thousands of people who see this page decide to register.' To the right of this text is the NHS logo and a red heart icon containing two circular arrows. Below the text is a green 'Join >' button followed by the text 'or [find out more.](#)' and the URL 'organdonation.nhs.uk'. Two red arrows are overlaid on the image: one points from the left towards the text 'Every day thousands of people who see this page decide to register.', and the other points from the bottom right towards the URL 'organdonation.nhs.uk'.

GOV.UK



Home

Service

Thank you.

Please join the NHS Organ Donor Register.

Every day thousands of people who see this page decide to register.

[Join >](#) or [find out more.](#) organdonation.nhs.uk

Three Die - Loss Aversion

GOV.UK

Home

Service

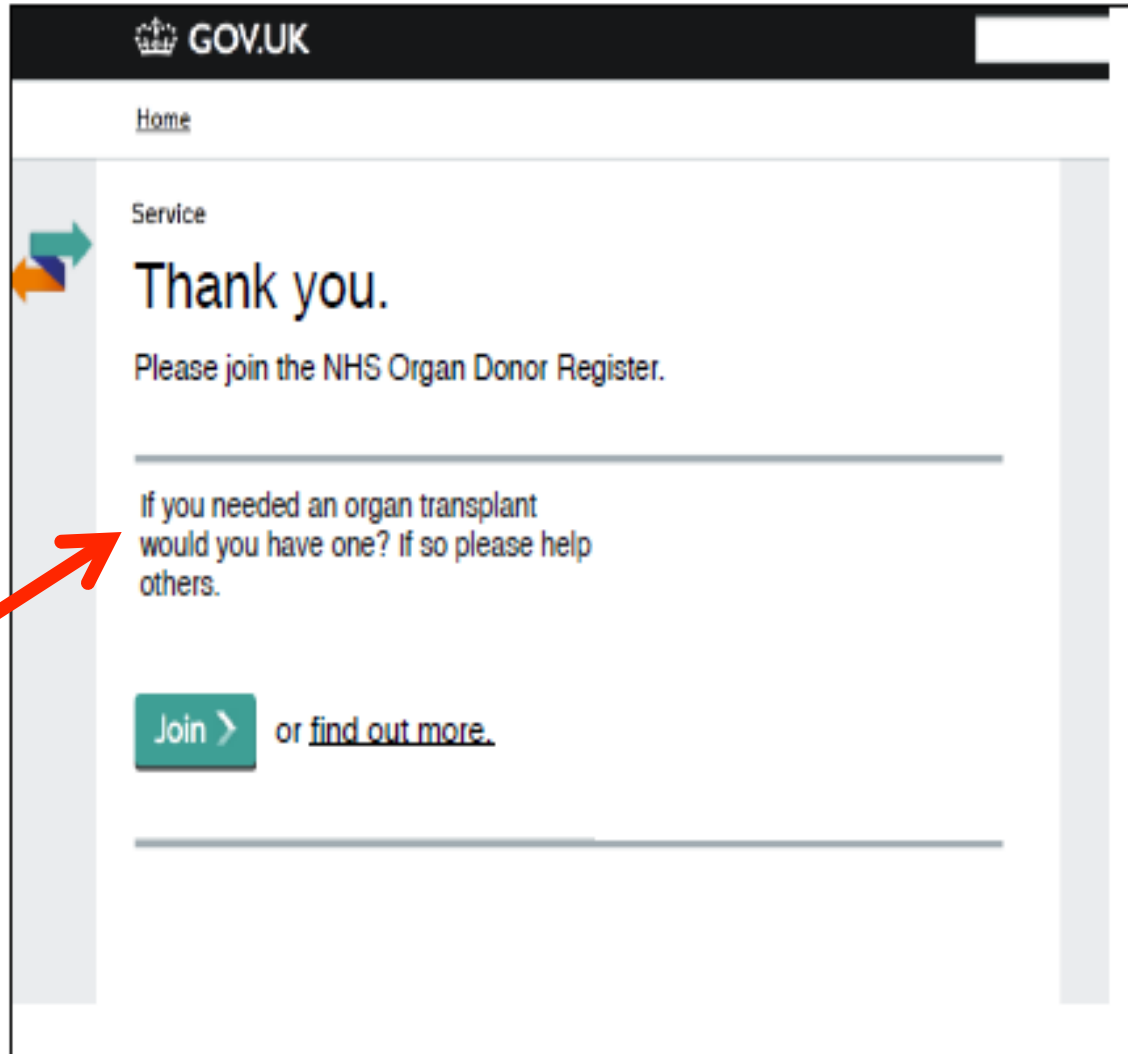
Thank you.

Please join the NHS Organ Donor Register.

Three people die every day because there are not enough organ donors.

[Join >](#) or [find out more.](#)

Reciprocity



GOV.UK

Home

Service

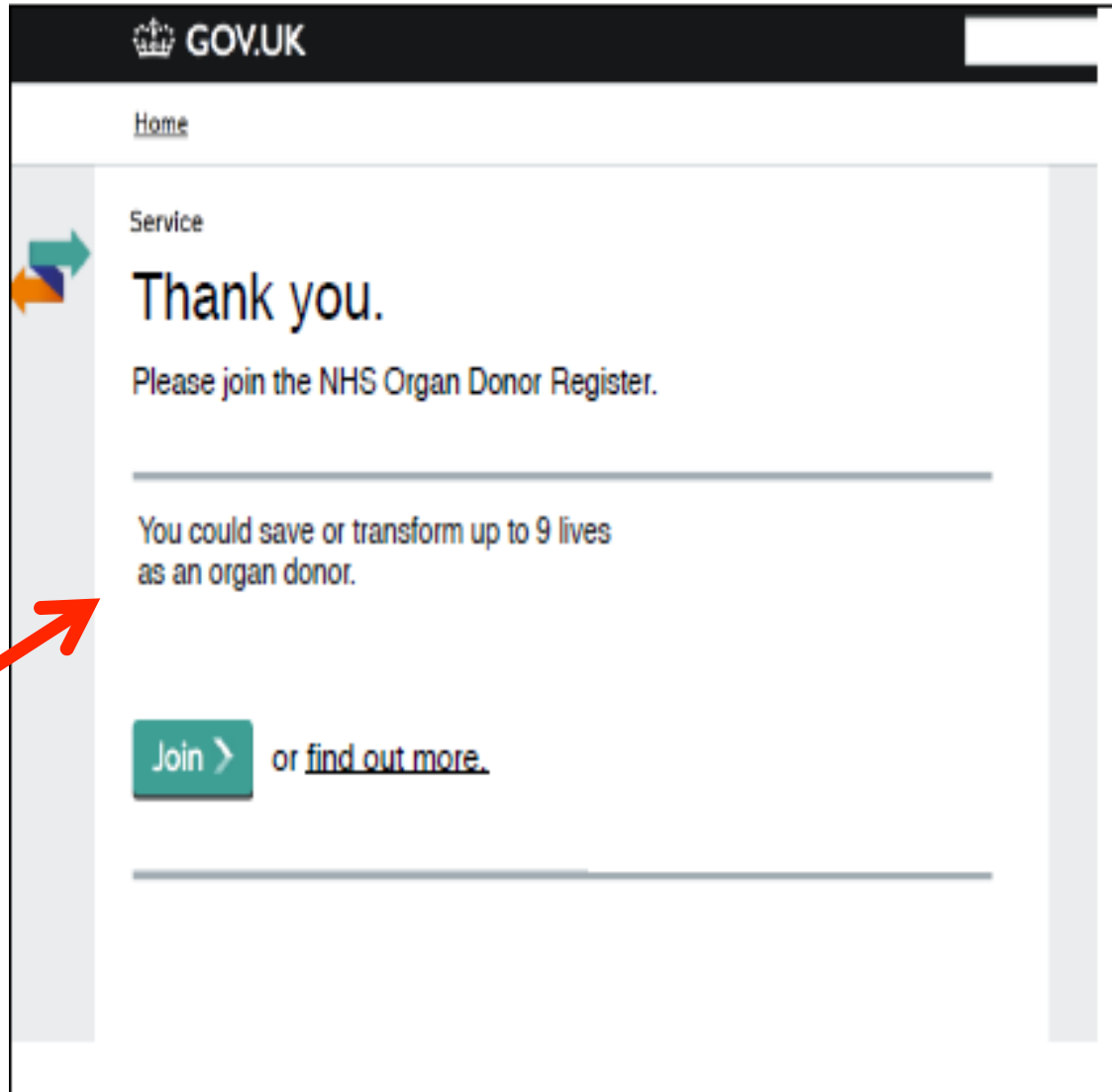
Thank you.

Please join the NHS Organ Donor Register.

If you needed an organ transplant would you have one? If so please help others.

[Join >](#) or [find out more.](#)

Nine lives – Self-efficacy



The screenshot shows a GOV.UK service page. At the top left is the GOV.UK logo. Below it is a 'Home' link. The main content area is titled 'Service' and features a 'Thank you.' message. Below this is the text 'Please join the NHS Organ Donor Register.' followed by a horizontal line. Underneath the line is the text 'You could save or transform up to 9 lives as an organ donor.' At the bottom of the main content area is a green button labeled 'Join >' followed by the text 'or [find out more.](#)'.

GOV.UK

Home

Service

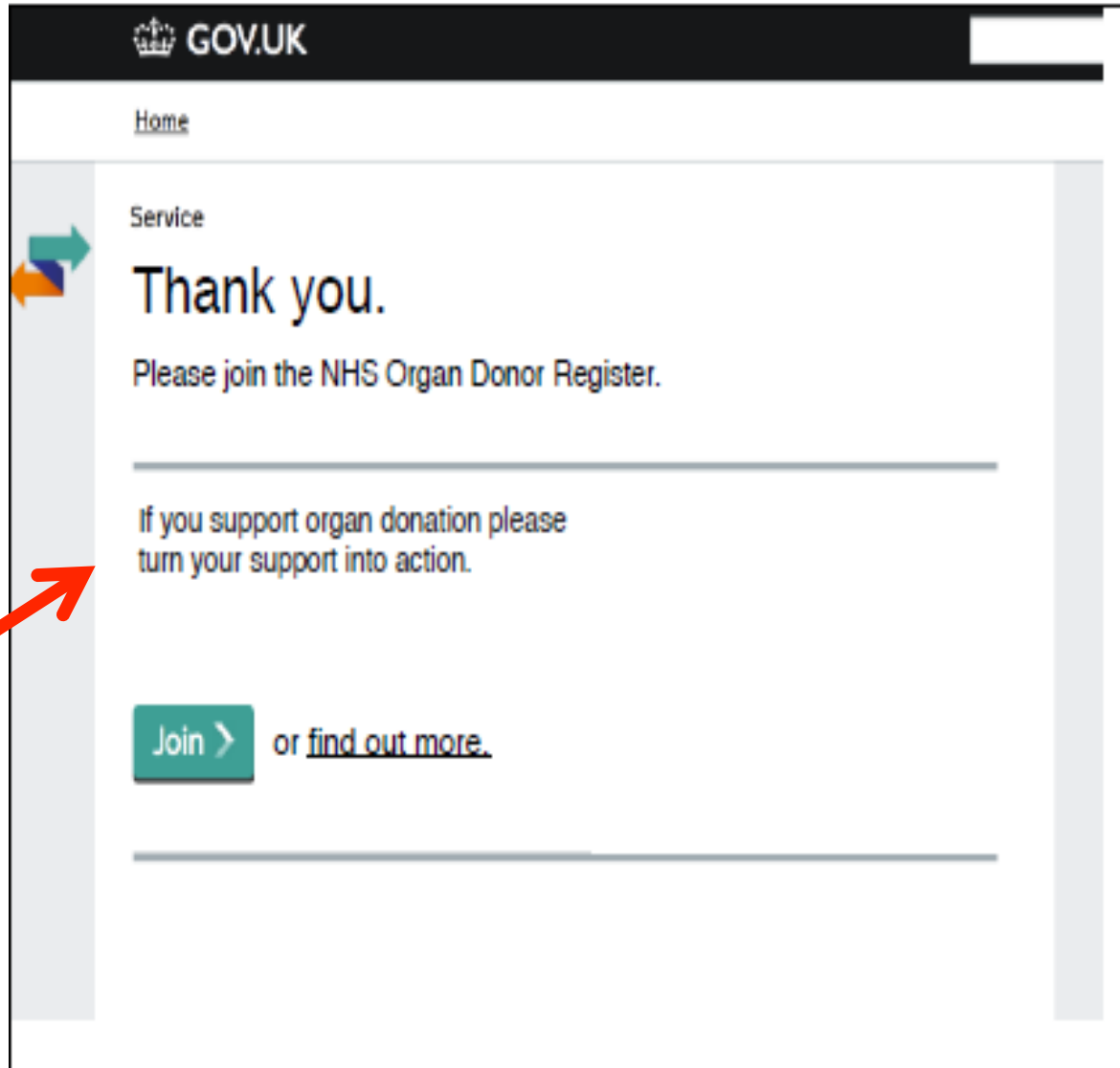
Thank you.

Please join the NHS Organ Donor Register.

You could save or transform up to 9 lives as an organ donor.

Join > or [find out more.](#)

Action – hypocrisy induction



The image shows a screenshot of a GOV.UK service page. At the top, the GOV.UK logo is visible. Below it, the word "Home" is underlined. The main content area is titled "Service" and features a "Thank you." message. Below this, it says "Please join the NHS Organ Donor Register." A horizontal line separates this from the text "If you support organ donation please turn your support into action." At the bottom, there is a green button labeled "Join >" followed by the text "or [find out more.](#)". A red arrow points to the "Join >" button.

GOV.UK

Home

Service

Thank you.

Please join the NHS Organ Donor Register.

If you support organ donation please turn your support into action.

[Join >](#) or [find out more.](#)

Results



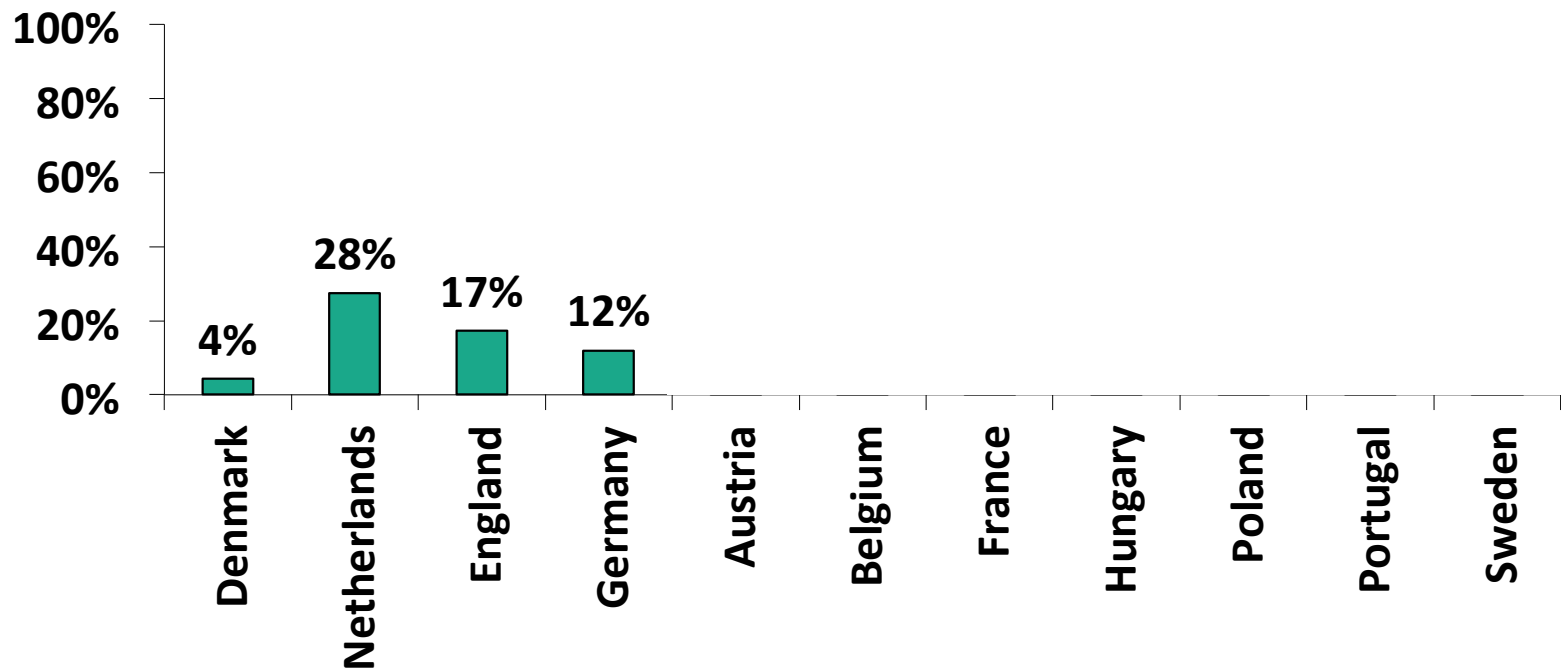
DO NOTHING.

Status Quo Bias:

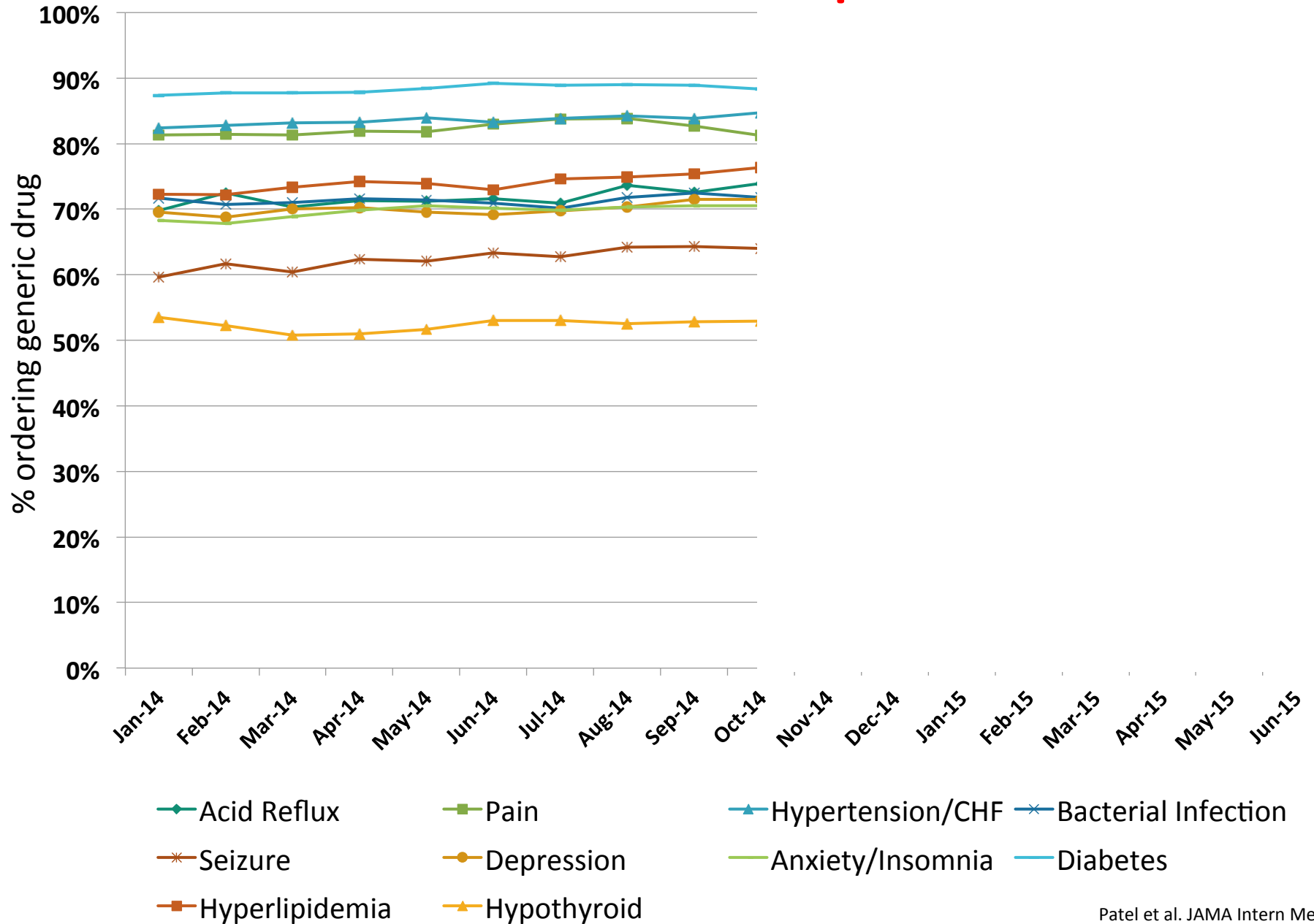
**People prone to
sticking with
defaults**

Organ Donation Default

% Choosing to Donate Their Organs

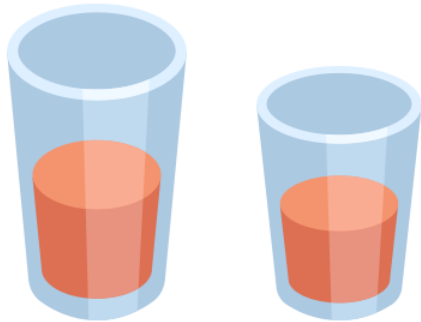


Default Prescriptions





**Portion limit
of 16 ounces
on sugary
drinks served
in restaurants**



The Nanny

You only thought you lived in the land of the free.



Bye Bye Venti

Nanny Bloomberg has taken his strange obsession with what you eat one step further. He now wants to make it illegal to serve "sugary drinks" bigger than 16 oz. What's next? Limits on the width of a pizza slice, size of a hamburger or amount of cream cheese on your bagel?



New Yorkers need a Mayor, not a Nanny.

Find out more at ConsumerFreedom.com
Center for Consumer Freedom

4 Lab Experiments

90 min session, \$25

Order drink at beginning

Given 40 cents for drink

Iced Tea or Lemonade



Bundling Beverages

623 participants \longrightarrow 362 order a drink

Medium Size
20 cents

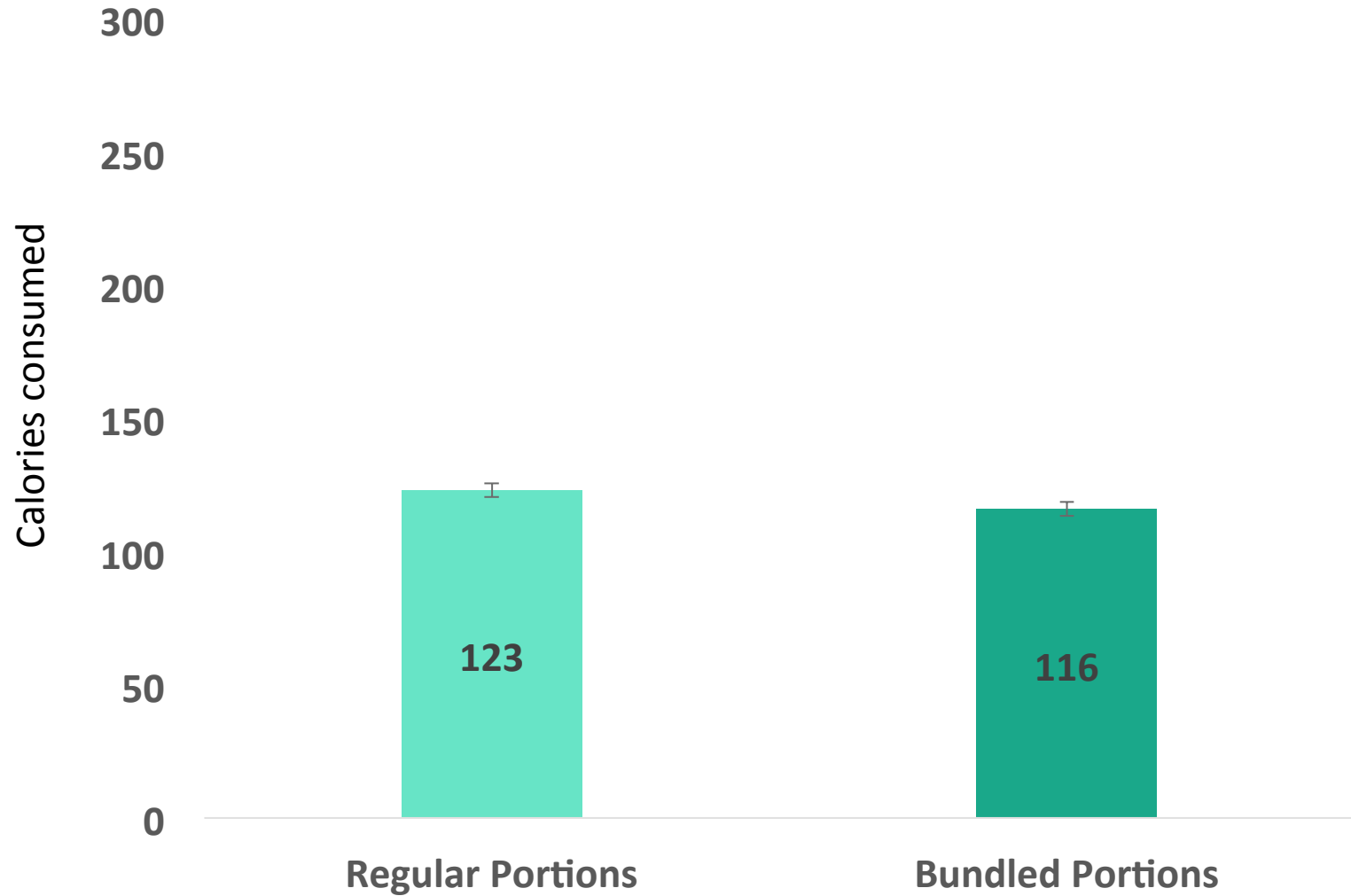
Large Size
30 cents

Regular
Portions

Bundled
Portions

TIP

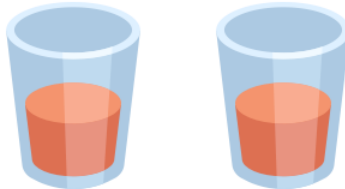
Calories Consumed (N=362)



F (1,358) = 1.67, p = .20

Summary

- **Bundling did not backfire**
- **Might even help curb consumption**



Free Refills Manipulation

470 participants  297 order a drink

Medium Size
20 cents

Large Size
30 cents

Regular
Portions

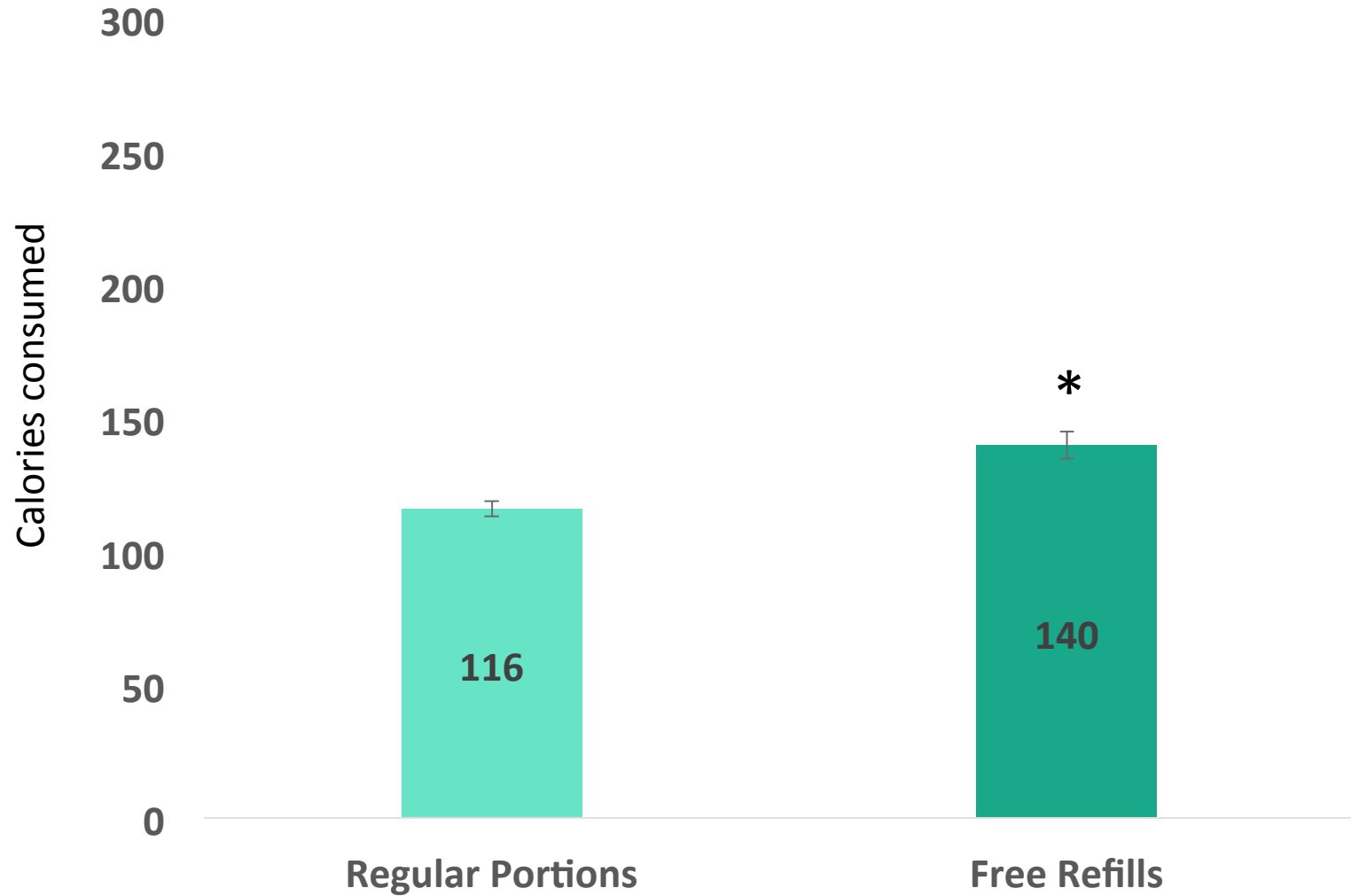
Portion Cap
+ Free Refills

Waiter vs. Self-Served



TIP

Calories Consumed (N=297)



F (1,293) = 22.48 p <.0005

Waiter vs. Self-Served

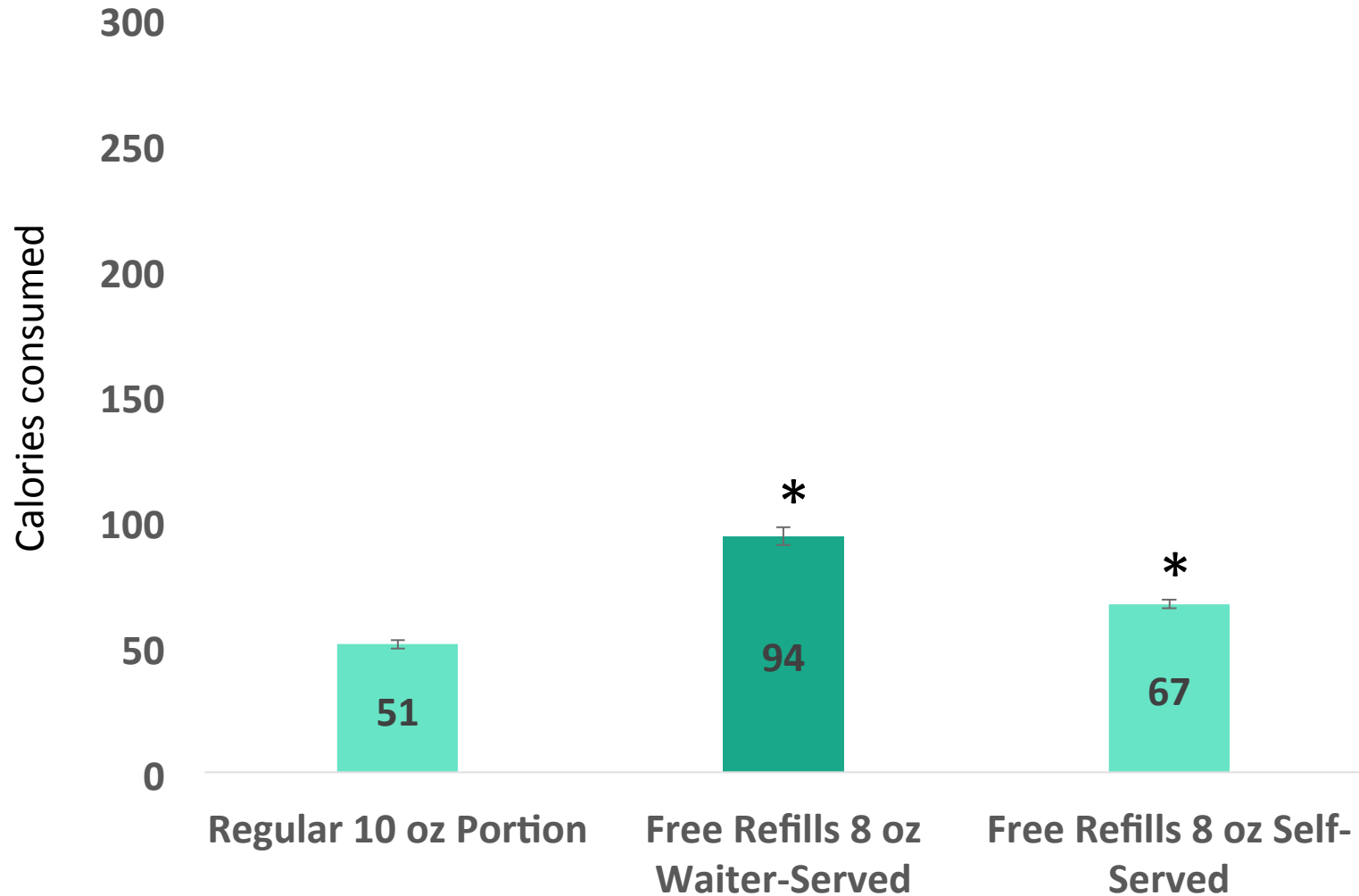


TIP

Calories Consumed (N=557 → 341)



Calories Consumed (N=284 Given Drinks)



Summary

- **Bundling did not backfire**
- **Free refills can backfire, but less so when self-served**
- **Need to study other portion limit contexts**



**Do not
become
too seduced**

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