

Don't Count Calorie Labeling Out: Calorie Counts on the Left Side of Menus Lead to Lower Calorie Food Choices

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Introduction

- The question of whether calorie counts lead people to make lower calorie food choices has been the subject of extensive research across multiple disciplines, including economics, psychology, marketing, and public health
- However, this abundance of studies (over 400 studies to date) has found little effect of calorie counts (Kiszko et al. 2014), leading many to call calorie labeling a policy "failure" (Carroll 2015; Singal 2015)
- We propose a new explanation for why calorie labels often have little effect on calories ordered: calorie labels are typically displayed to the right of food items
- Because the first information viewed receives disproportionate weight in subsequent decisions (Hammond et al. 1998) and perceptions of tastiness are processed faster than perceptions of healthiness (Sullivan et al. 2015), consumers may have already decided whether they will order an item or not before they even process the calorie information, preventing the calorie information from having much effect
- Accordingly, in the current research, we test whether placing calorie information to the left of menu items, such that it is processed before the item's name, leads to lower calorie food choices

Study 2: Hebrew Study

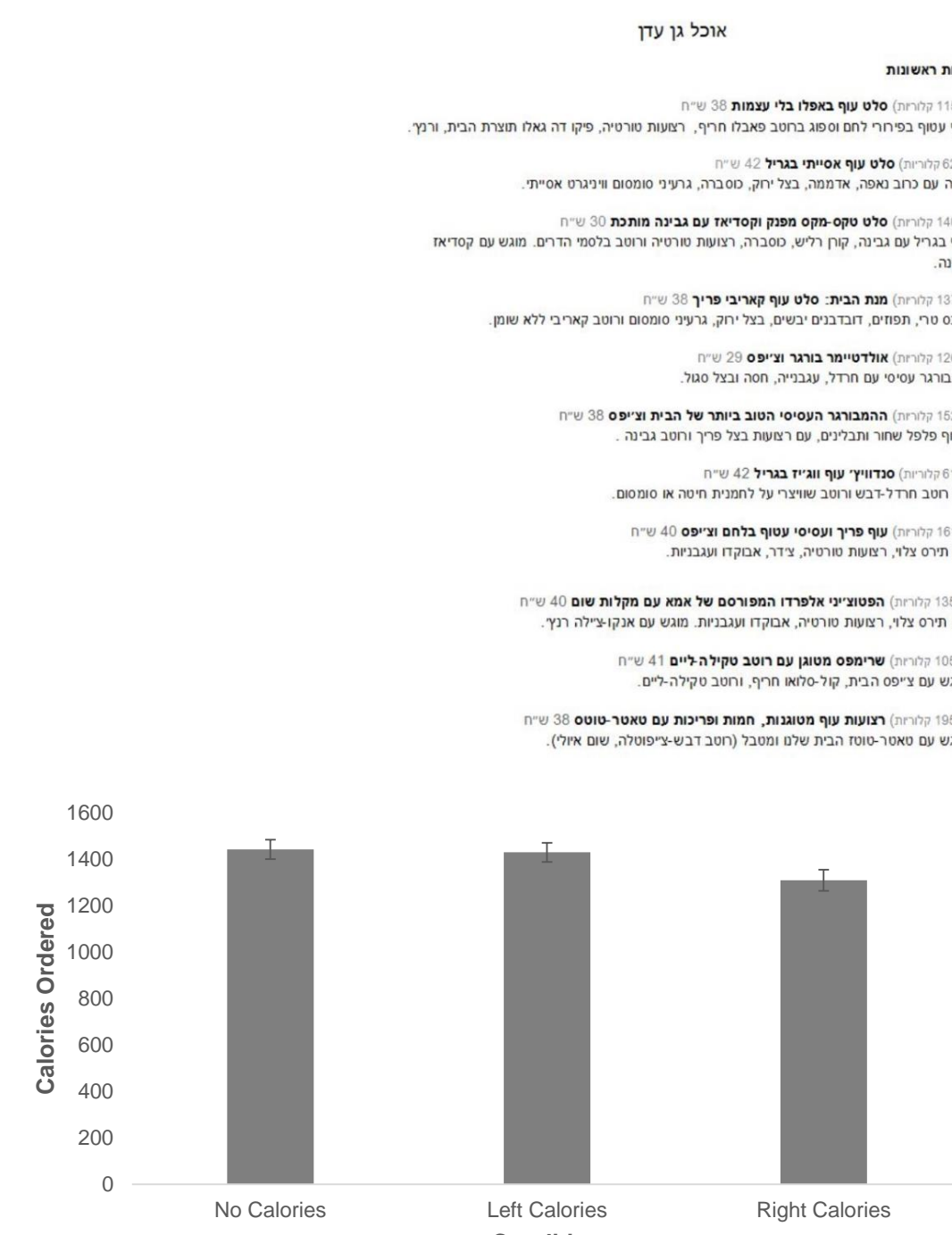
Research Question: Does the effect reverse for Hebrew speakers, who read from right-to-left?

Method:

- Participants (N = 254) were Hebrew-speaking Israelis
- Participants ordered from a menu (in Hebrew) with calorie information to the left, calorie information to the right, or no calorie information
- DV: Calories ordered

Results:

- Participants in the right calories condition ordered meals with significantly fewer calories (M = 1308.66) than participants in the no calories condition (M = 1441.45; $F(1, 251) = 4.80, p = .029$) and participants in the left calories condition (M = 1428.24; $F(1, 251) = 3.94, p = .048$)



Study 1: Field Study

Research Question: Does calorie information to the left (vs. the right) of menu items lead to lower calorie food choices in the real world?

Method:

- Diners (N = 157)
- Participants were randomly presented with a menu with either calorie information to the left of each menu item, calorie information to the right of each menu item, or no calorie information
- DV: Number of calories ordered
- Results:**
- There was a significant effect of condition ($F(2, 146) = 3.60, p = .030$), such that participants in the left calories condition (M = 654.53) ordered significantly fewer calories than participants in the no calories condition (M = 914.34; $p = .012$) and right calories condition (M = 865.41; $p = .038$). There was no significant difference between the no calories and right calories conditions ($p > .250$)

SANDWICHES	PRICE
HAMBURGER	.89
CHEESEBURGER	.99
FILET-O-FISH [®]	1.99
CRISPY CHICKEN	2.79
QUARTER POUNDER [®]	2.29
BIG N' TASTY [®]	2.29
BIG MAC [®]	2.39
CHICKEN McGRILL [®]	2.89
DOUBLE QUARTER POUNDER [®]	2.99

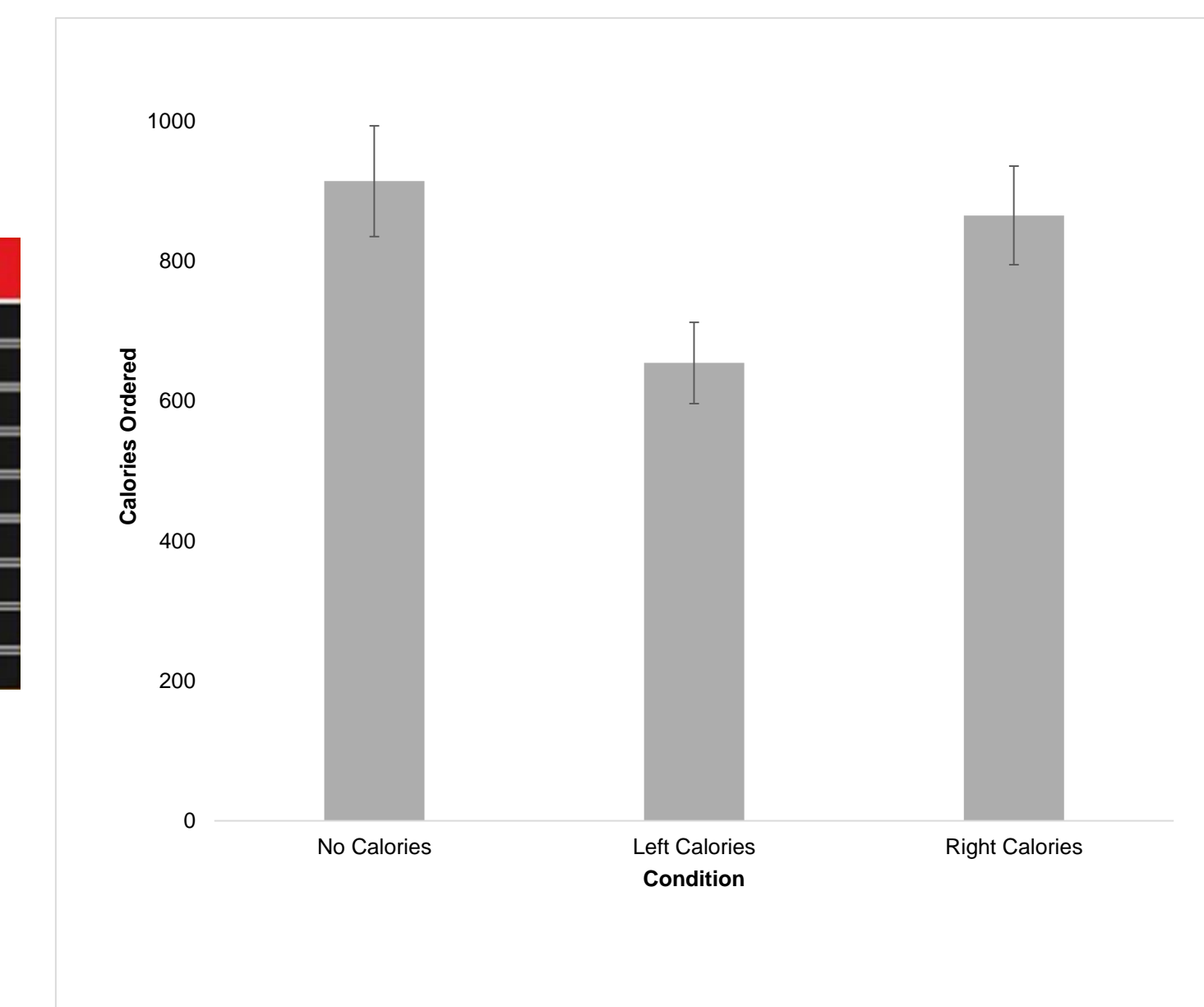
Average Calories Ordered = 914

SANDWICHES	CALORIES	PRICE
HAMBURGER	280	.89
CHEESEBURGER	330	.99
FILET-O-FISH [®]	470	1.99
CRISPY CHICKEN	550	2.79
QUARTER POUNDER [®]	430	2.29
BIG N' TASTY [®]	540	2.29
BIG MAC [®]	590	2.39
CHICKEN McGRILL [®]	450	2.89
DOUBLE QUARTER POUNDER [®]	760	2.99

Average Calories Ordered = 865

CALORIES	SANDWICHES	PRICE
280	HAMBURGER	.89
330	CHEESEBURGER	.99
470	FILET-O-FISH [®]	1.99
550	CRISPY CHICKEN	2.79
430	QUARTER POUNDER [®]	2.29
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590	BIG MAC [®]	2.39
450	CHICKEN McGRILL [®]	2.89
760	DOUBLE QUARTER POUNDER [®]	2.99

Average Calories Ordered = 655



Study 1: Calories ordered across three menu conditions in field experiment. Error bars show the standard error of the mean for each condition.

Study 3: Process Study

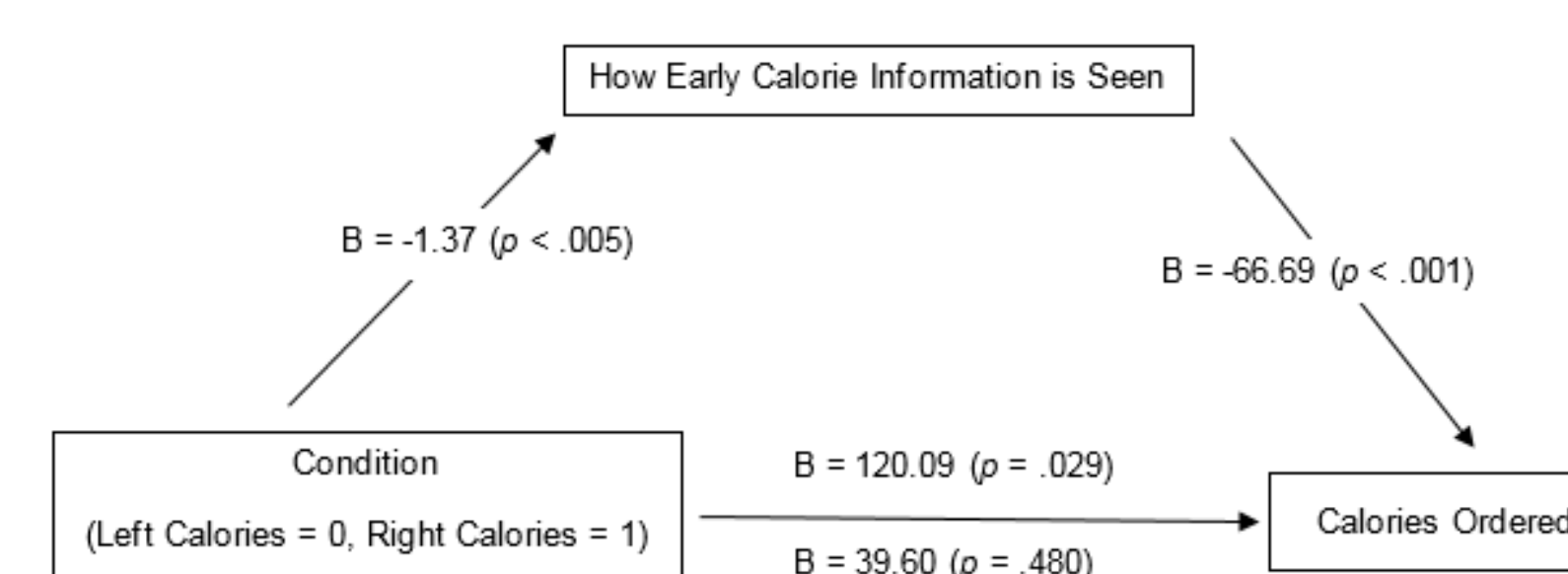
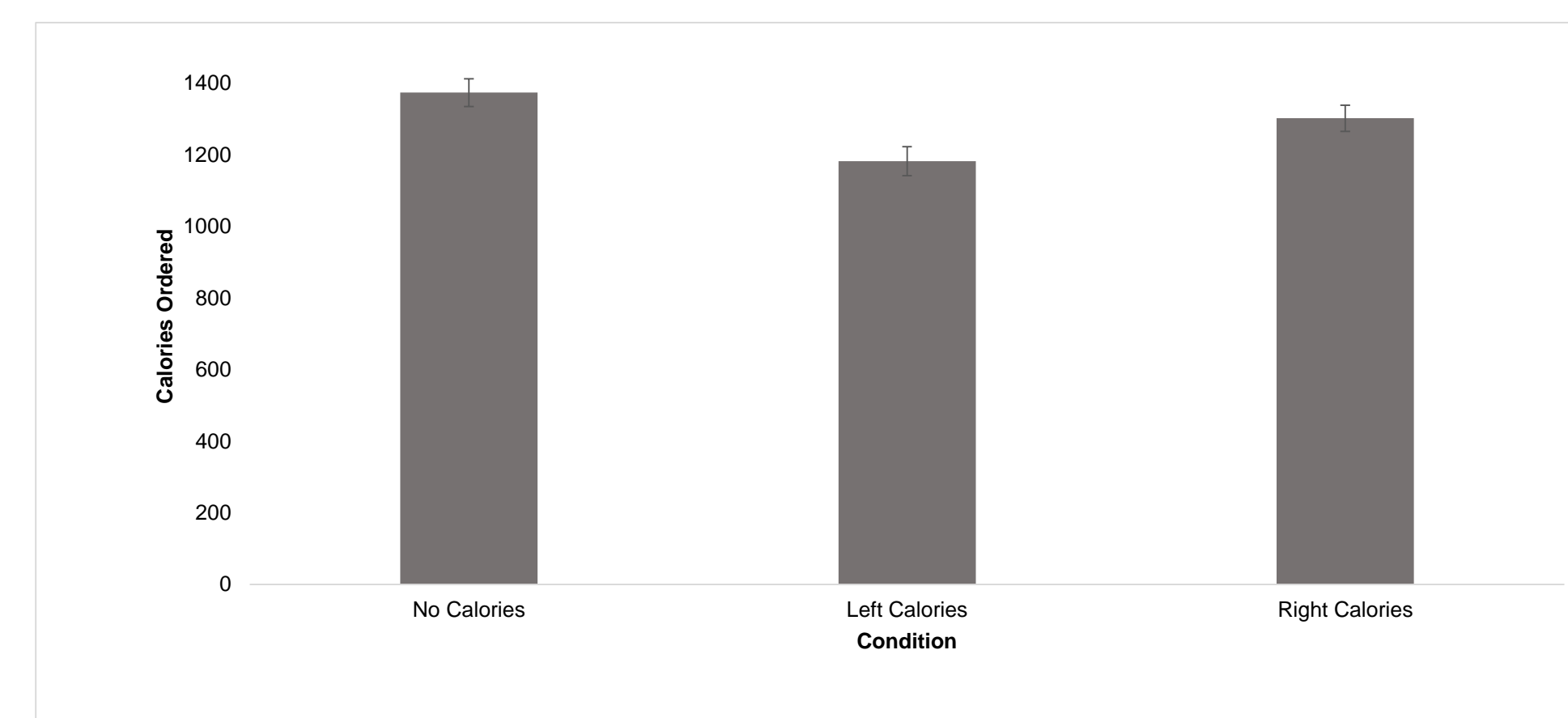
Research Question: Does calorie information to the left (vs. right) lead to lower calorie food choices because it is processed earlier?

Method:

- MTurk Workers (N = 458)
- Participants were exposed to a menu with calorie information to the left, calorie information to the right, or no calorie information
- Mediator: Participants reported whether calorie information was the first thing they saw

Results:

- Participants ordered significantly fewer calories when the calorie information was to the left (M = 1182.15) than when there was no calorie information (M = 1373.74; $p < .001$) and when calorie information was to the right (M = 1302.23; $p = .031$)
- How early the calorie information was seen mediated the difference between the left and right calories conditions (CI (95%) = [39.92, 135.77])



Conclusions

- Presenting calorie information to the left of menu items (vs. the right) leads to lower calorie food choices
- This is because calorie information to the left (vs. the right) is viewed earlier, increasing its impact on the subsequent food choice
- Accordingly, it appears premature to call calorie labeling a "failed" policy
- However, the government should mandate that all restaurants with calorie information on their menus and menu boards place the calorie information to the left of the menu items

References

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