

NORMALIZING MEAT-FREE MEALS: The Effectiveness of Defaulting the Black Bean Burger on Menus for Online Food-Ordering

By: Vicky Boyd | MSc in Sustainability Management | SSM1101Y: Research Paper | Supervised By: Dr. Nicola Lacetera
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INTRODUCTION

- The meat industry contributes 15% of total global greenhouse gas emissions¹ and scientists agree that changing food consumption needs to be a part of climate strategy²
- Despite restaurants offering meat-free options, menus often present meat as the primary choice and meat-free as the secondary choice
- There is greater preference for meat than meat alternatives in the Canadian foodscape³ and there are strong sociocultural factors driving meat consumption^{4,5,6}
- European (mostly) studies show that framing the meat substitute on menus as the default – the social norm – promotes uptake of the meat-free choice^{7,8,9,10,11,12}

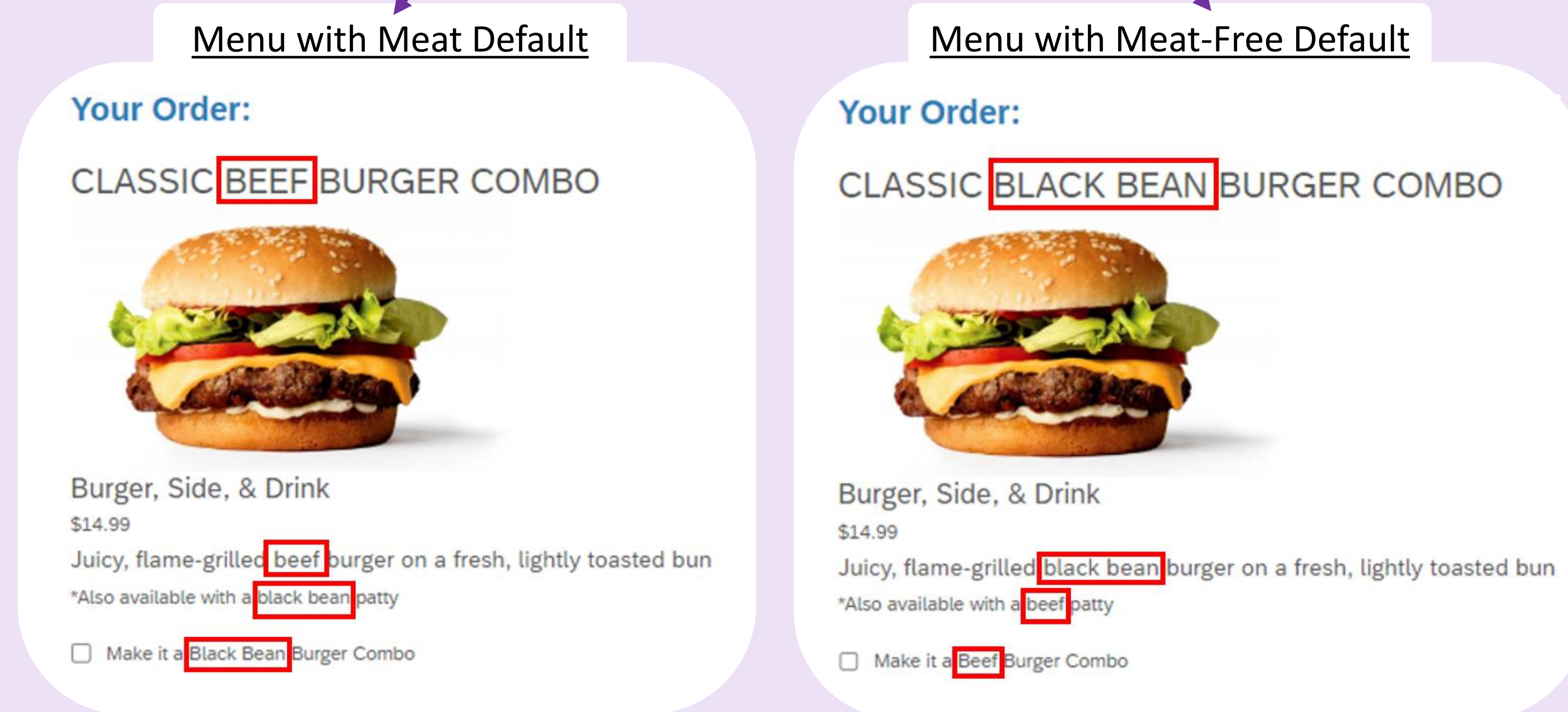
RESEARCH QUESTIONS

How do meat-free defaults on menus affect consumption behaviour in Canada?

- Will people order more meat-free food if given an online menu with meat-free defaults?
- Is the effectiveness of meat-free defaults based on demographics and/or diet preferences?

METHODOLOGY: Survey-Based Choice Experiment

700 participants were randomly given a menu to place a mock order online



HYPOTHESIS

There will be more meat-free orders when meat-free defaults are on menus

Red boxes added on poster for expositional purposes

Manipulation Check Question

True or False: The menu let you choose between a beef and black bean burger

True

False

Questions re Individual Traits

500 participants analyzed

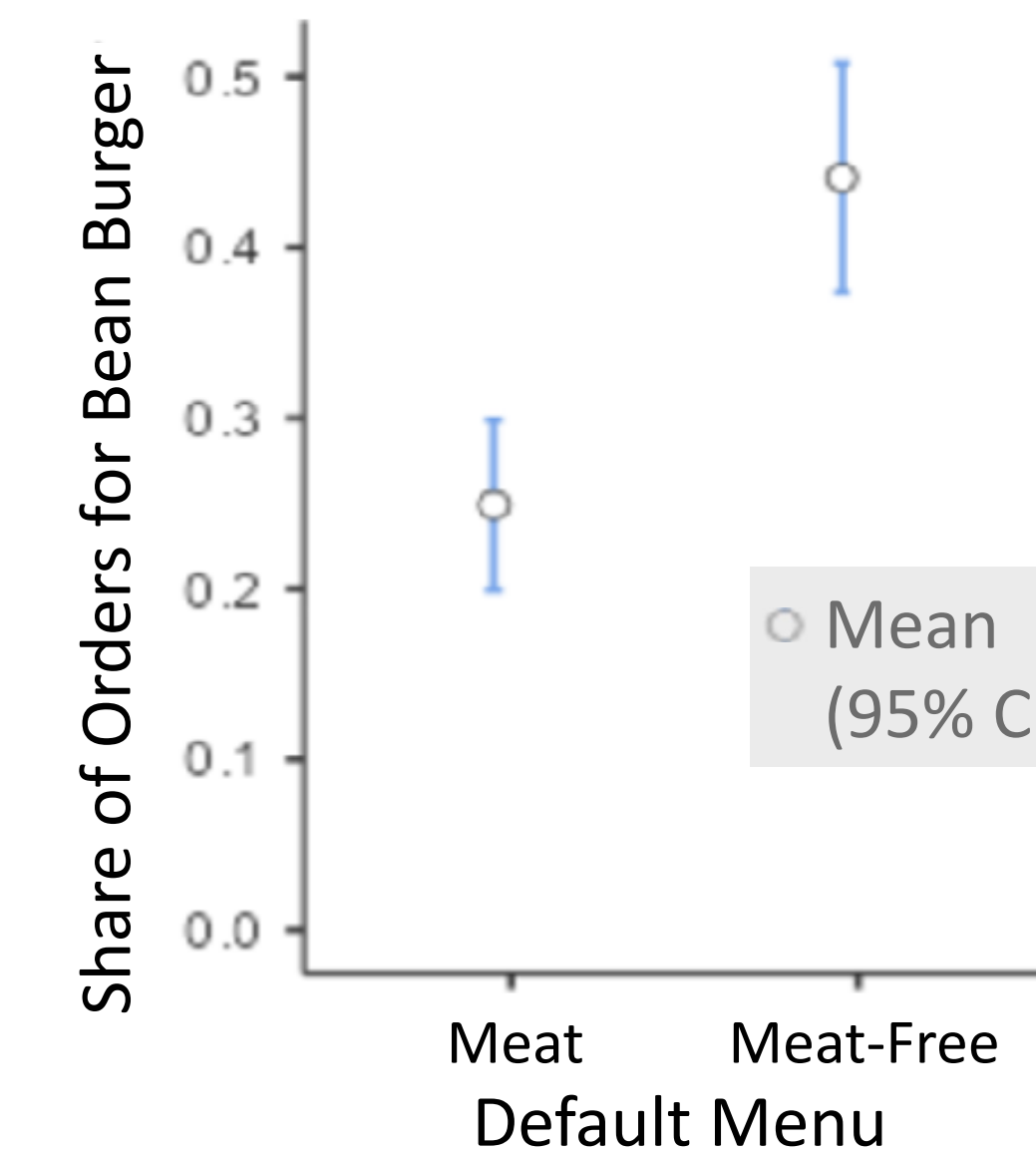
200 participants excluded for failing the Manipulation Check

PARTICIPANTS

- Undergraduate students from the ENV100 Environmental Science class at UofT
- 58% identified as female
- 86% identified as not White/Caucasian

RESULTS & DISCUSSION

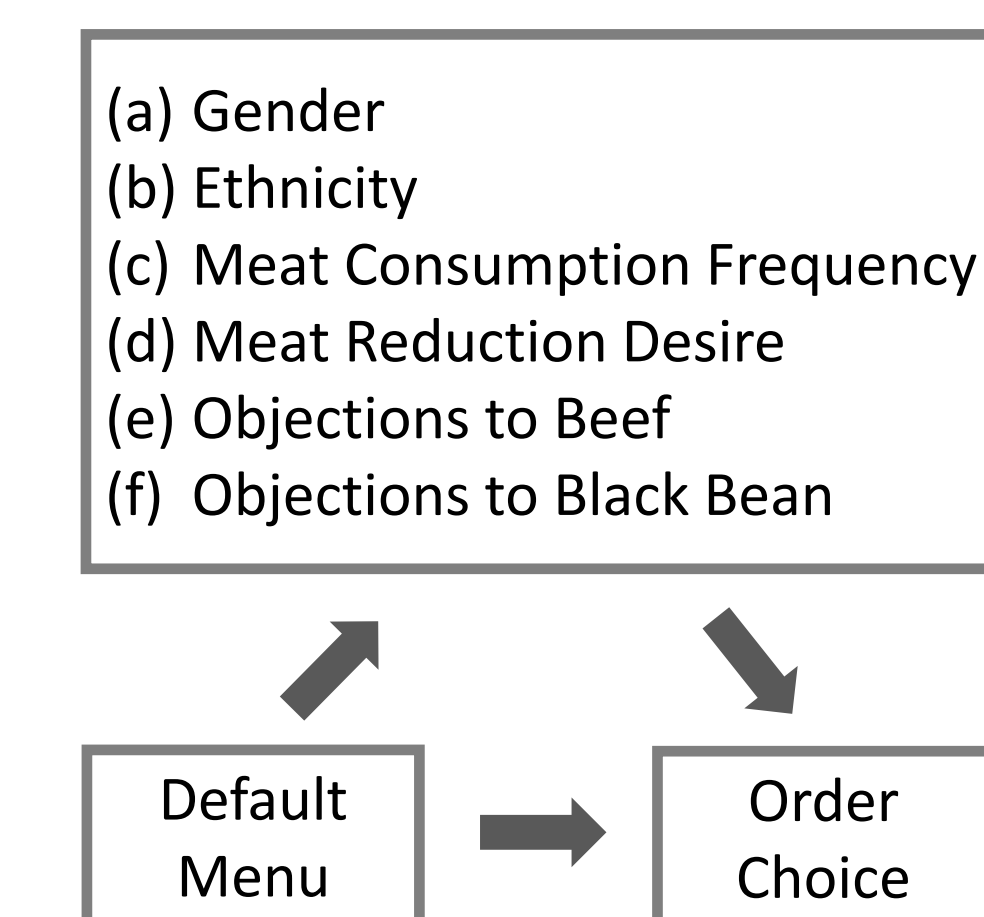
Figure 1. Bean Burger Proportion of Total Orders in Each Default



More black bean burgers were ordered from menus with the meat-free default than with the meat default

Changing the default option significantly influenced ordering behaviour towards accepting the default option (Fig. 1)

Figure 2. Study Model



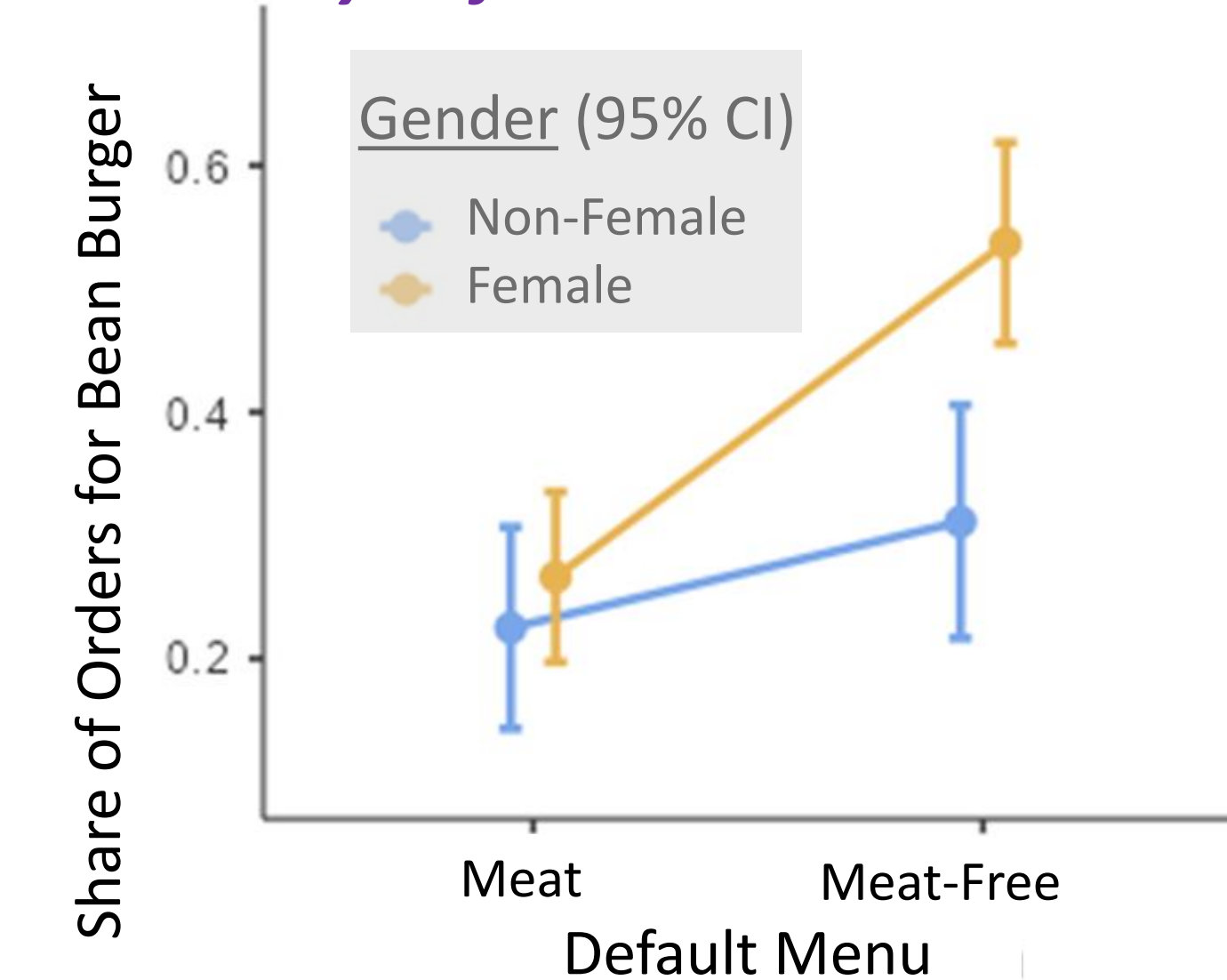
Individual traits moderated (affected the strength) of the default menu's effect on order choice (Fig. 2)

Eating habits were the most influential of all the traits

CHARACTERISTICS WHICH LED TO A GREATER MEAT-FREE DEFAULT EFFECT

- (a) Identifying as female
- (b) Not identifying as Caucasian
- (c & d) Reporting lower meat consumption
- (e) Having some objections to beef
- (f) Having no objections to black bean

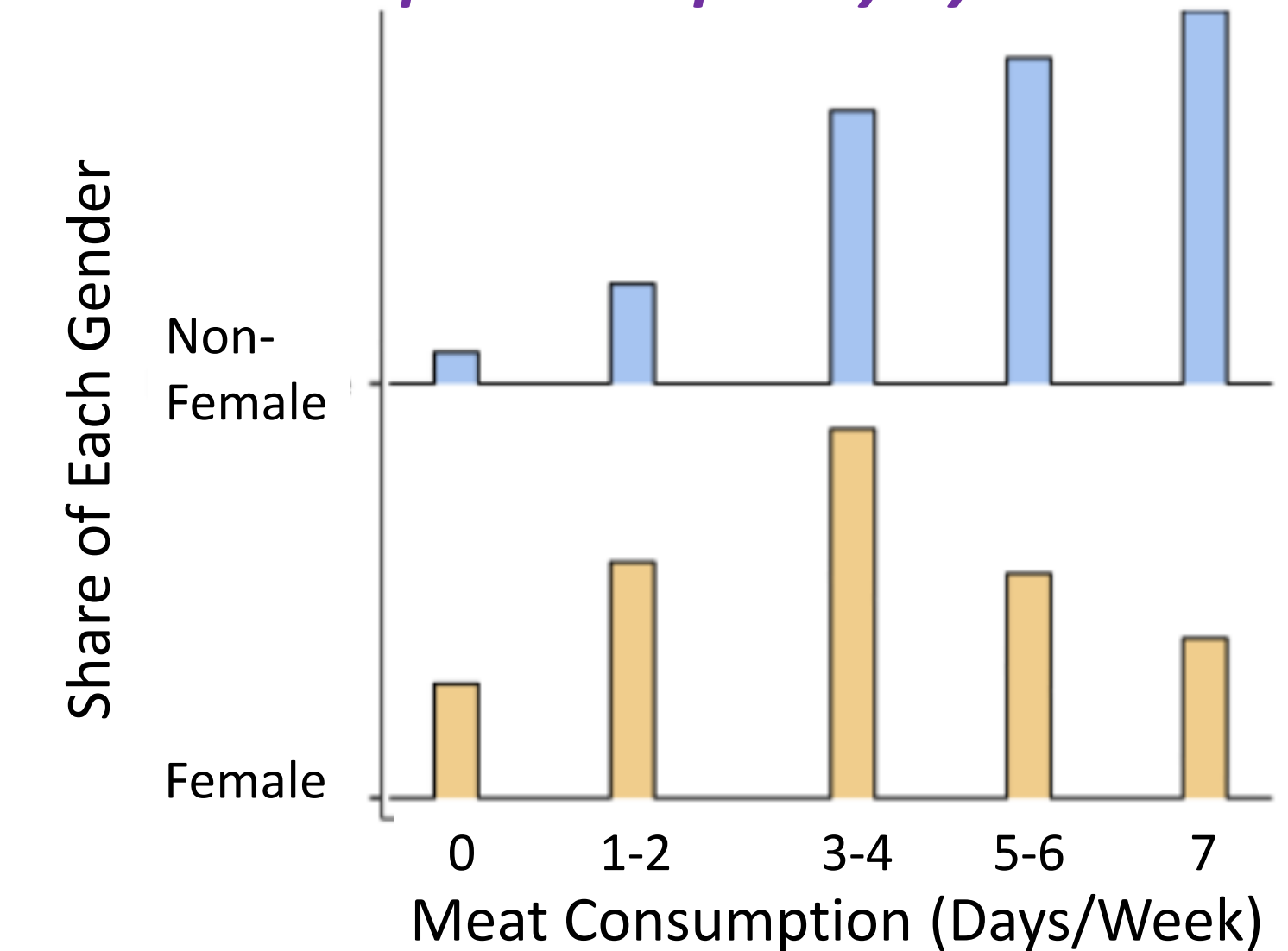
Figure 3. Proportion of Black Bean Burger Orders by Default Condition & Gender



Females were more influenced by the meat-free default to order the bean burger than non-females due to gender differences in meat consumption frequency (Fig. 3)

Females tended to consume less meat and have less reluctance to reducing their personal meat consumption than non-females (Fig. 4)

Figure 4. Distribution of Meat Consumption Frequency by Gender



KEY TAKEAWAYS

- Nudges do work to influence meat-free choices in the Canadian online food-ordering context!
- Meat-free defaults on menus are...
 - Most effective for meat-reducers (people trying to reduce their meat consumption) – a segment comprising more of females than nonfemales
 - Least effective for those with strong beliefs and habits regarding meat consumption
- Menu nudges should be part of a multi-intervention strategy to solve the meat consumption problem

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