IS BEEF GENDER A CREDENCE FACTOR FOR THE CHINESE?

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Abstract- **This study tested the hypothesis that cattle gender is a credence factor for the Chinese consumer acceptance of packaged retail-ready beef. A total of 605 Chinese were surveyed face-to-face in three regions of China to determine their preference of beef from male/bull or female/cow. For the majority of the respondents (78%), cattle gender had no effect on their preference for the packaged beef (P > 0.05), but for those that it did, packaged steak from bull (17%) was preferred (P < 0.05) over cow (5%). Respondent's preferences were dependent on their gender (P < 0.05) with disproportionately more females preferring cow over bull and *vice versa* for males. Younger consumers either "don't care" or tended to prefer bull while the older consumers preferred cow. The results of this study support our hypothesis that cattle gender is a credence factor in the acceptance of retail-ready packaged beef by some Chinese consumers.**

Key words: Consumer preference, meat quality, retail-ready

I. INTRODUCTION

Intrinsic and extrinsic/credence cues are used in making point of purchase decisions about meat. Bull beef is becoming more abundant due to the conversion of beef farms to dairying. China is growing in affluence and appetite for beef. In order to maximize the acceptance and profitability of bull meat in China, it's intrinsic and credence qualities must be optimized. This study was designed to determine whether cattle gender could be a credence factor for consumer acceptance of beef in China.

II. MATERIALS AND METHODS

Digital images of packaged retail-ready tray overwrapped cuberoll steaks were labelled with the only difference being the gender of the cattle on the package (bull or cow) and used to develop a questionnaire (Fig 1.). Colour copies of the questionnaire were printed and administered face-to-face to willing participants in three different regions of China. Chi-square and Correspondence analyses were performed in R 3.3.2.

III. RESULTS AND DISCUSSION

A total of 605 respondents completed the questionnaire with about equal number of males (46%) and females (54%). Majority (71%) of the respondents were between the ages of 19-30. Slightly more than half of all the respondents normally have beef once (25%) or more times a week (29%) and 3% had never had beef. Most (78%) of the survey respondents "didn't care" (P > 0.05) about the gender of the pre-packaged retail-ready beef. For those who cared, male beef (bull) was preferred over female (cow). Considering the packaged steaks are the same visually/intrinsically, the preference of bull over cow clearly implies that credence rather than intrinsic quality factors are the reasons for the difference in the preferences shown. Male and female respondents differed in their preference for the gender of their beef (P < 0.05) (Fig. 2). Simply put, there is a tendency for male Chinese to prefer male beef and *vice versa* for female Chinese.

Older Chinese consumers tended to be associated with cow and younger ones with bull or "don't care" (Fig 3). Males 31-50 or older were associated more with cow, and the 19-30 and <18 with bull. For females, the >50 and <18 were associated more with cow and the 19-30 and 31-50 with bull (Fig. 3).

The effect of cattle gender on Chinese beef acceptability is a different credence category from the ones identified in previous studies (Grunert, 1997; Realini *et al*., 2013; Henchion *et al*., 2016). This credence factor may have associational, attitudinal, metaphoric or emotional triggers other than meat quality, which would require a quantitative multimethod approach to confirm and to exploit in marketing beef.

IV. CONCLUSION

Gender of beef did not matter to most Chinese (78%). To those it mattered (22%), male beef (17%) was preferred over female (5%). This presents an opportunity to differentiate beef from bulls in China on its credence value.
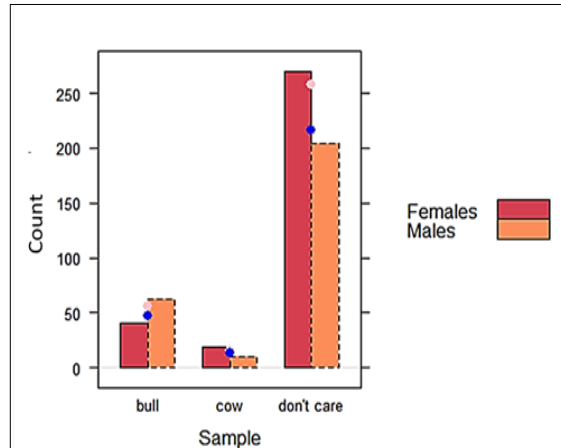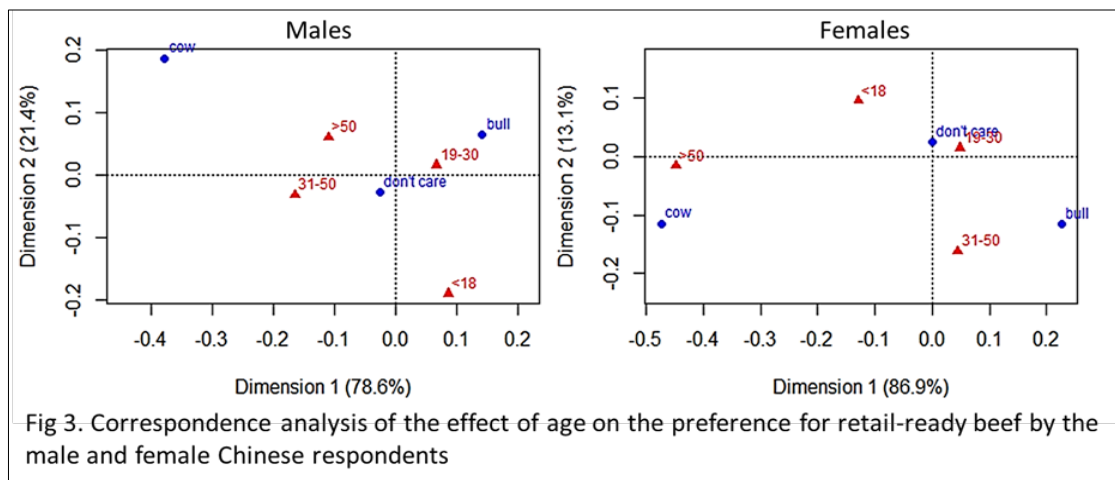

Fig. 1. The questionnaire

Fig. 2. Bar graph of the number of respondents separated by gender and their preference for retail-ready beef. The Pink dots are the expected count for females assuming that the responses are independent of gender, likewise Blue is for male.

Fig 3. Correspondence analysis of the effect of age on the preference for retail-ready beef by the male and female Chinese respondents

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