

Extended Abstract | *The 1st Research Innovations in Sustainable Marketing: A Global Virtual Symposium*

Modeling Predictors of Intention to Substitute Plant-Based Protein Alternatives for Meat in Asian versus Western National Markets: Implications for International Sustainable Marketing Theory and Practice

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Extended Abstract: With the recognition that meat production is a significant source of greenhouse gas emissions, many have recommended increasing the frequency of plant-based protein alternatives to meat as a way to mitigate the adverse effects of climate change. Global marketers who are interested in increasing sustainable consumption can encourage consumers in multiple national markets to consider choosing plant-based meat substitutes for one or more regular meals a week. Doing so, however, requires a better understanding of the factors that influence consumer intention to try plant-based substitutes. Unfortunately, studies addressing this issue are very limited and, as a result, global corporations have little or no information to guide their standardization/adaptation strategies in different national markets. To address this limitation, the present study undertakes a cross-national analysis to identify the motivations, opportunities, and abilities that affect intention to substitute plant-based protein for meat in four major national markets that are similar (e.g., large economies with sizable middle classes) yet culturally distinct: United States, United Kingdom, China, and Japan. Of particular interest are the antecedents that are likely to be “etic” and, therefore, more conducive to global standardization or “emic” and, thus, in need of local

adaptation.

Quota samples drawn from adult panels (overall, ages 25-65, $\bar{x}$ = 45 years old; 50% female) in the United States (n = 403), United Kingdom (n = 418), China (n = 404), and Japan (n = 418) completed a cross-sectional, language-appropriate online survey that examined individual-level antecedents to intention to substitute plant-based protein for meat. The Chinese and Japanese versions were double-back translated from English. Samples were recruited in 2021 and 2022 by panel management firms that contract with Qualtrics, a major online research company based in the United States. Participants received e-mail invitations and voluntarily joined the studies.

Stepwise multiple regression models were run in each of the four countries. All country-level regression models were statistically significant ($p < .001$). Regression diagnostics for multicollinearity (variance inflation factors < 1.90) and autocorrelation ($1.791 \leq d \leq 2.088$) were acceptable. In all countries, green attitude and confidence in one's ability to prepare a satisfying meal with plant-based protein positively predicted greater intention to substitute plant-based meat alternatives in main meals ($p < .001$). Among consumers in Japan and the United States, health consciousness was positively associated with intention ($p < .05$), whereas

subjective food knowledge was negatively related ($p < .05$). The relationship between meat-eating frequency and intention to substitute was negative in the United Kingdom ($p < .001$) and positive in China ($p < .001$), suggesting that heavy meat consumption in the former (latter) decreases (increases) plant-based protein intentions. Finally, gender identification was a positive predictor in China ($p < .001$) and the United States ($p = .003$); those who identified as more feminine (vs masculine) reported higher intention.

Nowhere is the issue of multi-national standardization/adaptation more pressing than in the global food product market. Not only is this market extremely large and profitable, it is also one in which individual-level differences are likely to drive consumer product attribute preferences and purchase intentions. Therefore, the decision of whether to standardize or localize a firm's offerings is especially relevant to both academic researchers and brand managers. Taken together, study results suggest that a "one-size-fits-all" approach, along with East-West stereotypes, should be avoided when developing marketing strategies to promote plant-based meat alternatives. Rather, findings indicate that global marketers should use a combination of standardization and adaptation. For example, since green attitude appears to be an etic antecedent to intention to substitute, marketers can target consumers who value eco-friendly lifestyles in all four countries using messages that highlight the positive environmental impact of plant-based diets. Marketers should also look for ways to increase confidence in how to prepare plant-based meals in each of these countries. Providing recipes and cooking tutorials on social media may be one way to do so. At

the same time, localized strategies are also warranted, as several antecedents appear to be more emic. For instance, compared to their counterparts in China and the United Kingdom, U.S. and Japanese consumers who are motivated by a desire to be healthy are more likely to find brand messages that emphasize the health benefits (e.g., lower cholesterol) of plant-based meat alternatives appealing.

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