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# The Power of Words: Investigating Linguistic Nudges to Reduce Meat Consumption

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## Abstract

Meat consumption contributes significantly to environmental degradation and public health burdens. Yet, altering dietary behavior remains a challenge, particularly due to cognitive and cultural resistance. This study investigates whether linguistic nudges, specifically, labeling food options without meat using health-oriented language versus a language that underlines the vegetarian identity alone, can influence consumer food preferences. A survey-based experiment was conducted to compare preferences for sandwiches labeled as “The Vegetarian Choice” versus “The Healthy Choice”, incorporating demographic, attitudinal, and behavioral variables. Results from a Wilcoxon signed-rank show no statistically significant difference in preference between the two labels. However, patterns suggest growing openness to vegetarian options and minimal evidence of social stigma toward vegetarianism among the respondents, all of whom were Italian. These findings point to cultural shifts in dietary norms and suggest that health-related labels alone may not be sufficiently persuasive to alter food preferences. The results provide new insights into consumer behavior and the nuanced role of framing in sustainable consumption strategies.

**Keywords:** Linguistic nudges, meat consumption, sustainability, cognitive bias, behavioral economics

## 1. Introduction

In recent years, global concerns surrounding climate change, public health, and food sustainability have intensified, prompting scholars and policymakers to investigate strategies for reducing the environmental footprint of dietary habits. The global food system is under increasing scrutiny for its role in environmental degradation, as agricultural practices, particularly those related to livestock farming, contribute significantly to deforestation, biodiversity loss, and resource depletion. For instance, meat consumption has been identified as a major contributor to greenhouse gas emissions (Gerber et al., 2013). Additionally, industrial meat production requires vast amounts of water and land, further straining natural ecosystems and accelerating climate change (Mekonnen & Hoekstra, 2012; Godar et al., 2014). Beyond environmental concerns, excessive meat consumption is linked to a range of public health issues, including cardiovascular diseases, obesity, and antibiotic resistance, raising alarm over the long-term sustainability of current dietary patterns (Marshall & Levy, 2011; Pan et al., 2012; Satija et al., 2017). Despite increasing awareness of these pressing challenges, shifting dietary behaviors remains a complex task. Food choices are deeply rooted in cultural traditions, personal preferences, and social norms, making large-scale behavioral change difficult to achieve (Bastian & Loughnan, 2017). Many consumers, even when aware of the negative impacts of high meat consumption, struggle to modify their diets due to habit persistence, lack of convenient alternatives, or perceived social pressures (Fiddes, 1991; Ruby & Heine, 2011; Markowski & Roxburgh, 2019). Addressing these challenges requires a multifaceted approach that moves beyond traditional regulatory measures, such as taxation or outright bans, which can often be met with resistance. Instead, recent research in behavioral economics and psychology suggests that subtle interventions, known as nudges, may be more effective in steering individuals toward more sustainable dietary choices without restricting their autonomy (Bianchi et al., 2018; Kurz, 2018; Krpan & Houtsma, 2020; De Groot, 2022).

This research explores the role of linguistic nudges as a behavioral intervention aimed at reducing meat consumption. Nudging, a concept rooted in behavioral science, offers a non-coercive means of influencing decision-making by subtly altering the way choices are presented (Thaler & Sunstein, 2008). Linguistic nudges, in particular, utilize framing techniques to shape perceptions and encourage pro-environmental and health-conscious behaviors (Lakoff, 2004; Thibodeau & Boroditsky, 2011). Building on this, the core component of this work is an empirical investigation conducted through a survey designed to assess the effects of linguistic framing on consumer food preferences. The survey was structured to examine whether labeling a vegetarian dish with a health-oriented tag, rather than explicitly

marking it as “vegetarian”, would influence participants' selection choices. The results of this study offer insights into the potential of linguistic nudges in promoting plant-based diets and inform future applications of behavioral interventions in sustainable consumption policies.

The remainder of the paper is organized as follows. Section 2 presents the theoretical background, discussing both the behavioural biases associated with vegetarian choices and the role of labels in shaping behaviours. Section 3 describes the survey-based data collection and the statistical methods employed. Section 4 reports and discusses the empirical findings. Finally, Section 5 draws the conclusions.

## **2. Theoretical Framework**

This study rests on four primary assumptions. First, vegetarian diets are often stigmatized, potentially influencing consumer choices. Social stigma associated with vegetarianism arises from cultural norms and stereotypes that portray vegetarian diets as less satisfying, overly restrictive, or linked to specific ideological beliefs (Ruby & Heine, 2012). This perception can create social pressure and fear of judgment, discouraging individuals from choosing vegetarian options, particularly in social dining contexts where conformity to group norms is influential (Markowski & Roxburgh, 2019). Understanding this stigma is crucial, as it may not only reduce the likelihood of choosing vegetarian dishes but also affect how people perceive the individuals who consume them, potentially labeling them as moralistic or self-righteous (Minson & Monin, 2012). Second, labeling significantly impacts food selection by shaping consumer expectations and perceptions. Labels serve as cognitive shortcuts that influence how people evaluate food products before tasting them (Wansink et al., 2005). Descriptive labels that emphasize taste, texture, or other sensory experiences have been shown to enhance the perceived appeal of dishes, whereas simplistic or overly functional labels, such as “vegetarian”, may unintentionally reinforce negative stereotypes or stigmatizing associations (Bacon & Krpan, 2018). Third, presenting vegetarian options with more appealing labels, rather than simply marking them as “vegetarian”, enhances their attractiveness. For instance, research demonstrates that labeling vegetarian dishes with creative and indulgent names significantly increases their selection by shifting focus from dietary restriction to culinary enjoyment (Turnwald et al., 2017). This indicates that strategic labeling can mitigate social stigma by reframing vegetarian choices as pleasurable rather than depriving. Fourth, health-related labeling is generally perceived as desirable due to the positive connotations associated with health and well-being. Consumers often equate healthy eating with self-control, vitality, and social status (Chandon & Wansink, 2012).

Building on this foundation, the present study draws direct inspiration from the work of Krpan and Houtsma in their study, “To Veg or Not to Veg? The Impact of Framing on Vegetarian Food Choice” (2020). Their study examined how different labeling strategies influenced consumer preferences for vegetarian dishes, finding that labels framed in a more appealing and engaging manner significantly increased the attractiveness of vegetarian options compared to conventional “vegetarian” labels. Their research suggests that individuals may be more inclined to choose plant-based meals when the labeling emphasizes positive attributes such as taste, indulgence, or familiarity rather than simply highlighting their vegetarian nature. Building on their findings, this study seeks to extend the discussion by investigating whether health-related labeling can serve as a more effective and desirable alternative to the traditional “vegetarian” label. While Krpan and Houtsma’s study primarily focused on the appeal of labels that evoke sensory and hedonic experiences, this research examines whether emphasizing health benefits can similarly influence consumer choice and make vegetarian dishes more attractive. By reframing vegetarian options in terms of their perceived health advantages, this study aims to explore whether health-oriented labeling can mitigate potential negative perceptions associated with vegetarianism.

## **3. Methodology**

A survey was thus designed to examine whether the labeling distinction between “vegetarian” and “healthy” has a measurable impact on consumer preference, by presenting respondents with identical vegetarian sandwiches labeled differently and asking them to indicate their preferences. To achieve this, the survey was structured with careful consideration of question design and sequencing. The survey questions can be divided in three topic’s groups. The “Dietary Habits” section assessed participants’

typical lunch break routines, including eating frequency and motivations. The “Food Preferences” section included questions on specific meal choices, likewise, requiring participants to rank their preferred meal types (e.g., panini, salads, hot dishes), specific sandwich options, and the importance of various factors, such as health, affordability, and convenience, in shaping meal choices. Lastly, the “Personal Information” section collected essential background information, including age, gender, nationality, and education level.

The core focus of the survey was to assess whether presenting the same sandwich with different labels would influence respondents’ preferences toward a vegetarian alternative. To capture this effect, two key ranking questions were designed. Participants were asked to rank three sandwich options from most to least preferred (1 = most preferred, 3 = least preferred). The sandwich options remained identical in both questions, consisting of two meat-based options (“Il Rustico” and “Il Classico”) and one meat-free option. However, the meatless sandwich was labeled differently in each question: in the first instance, it was called “The Vegetarian Choice”, whereas in the second, it was labeled “The Healthy Choice”. These two questions were deliberately placed apart in the survey to reduce the likelihood of respondents noticing the labeling manipulation.

To further contextualize labeling effects, the survey also included two additional ranking questions that focused on sandwich preferences independent of labels. In these questions, participants ranked four sandwiches, two vegetarian and two meat-based, solely based on their ingredients, without any descriptive labels. This methodological approach allowed for an assessment of whether underlying taste preferences, rather than labeling, played a more decisive role in consumer decision-making. By comparing these responses with the results from the labeled sandwich rankings, the study aims to determine whether potential stigmatization of vegetarian labeling significantly influences consumer preference. Finally, demographic and personal information questions (e.g., gender, age, education level) were incorporated to add an additional layer of analysis, allowing for potential correlations between demographic characteristics and food choices.

The method employed to gather observations was a non-probability sampling approach. This approach was deemed appropriate due to the exploratory nature of the research and the logistical constraints of accessing a truly random sample. Data collection occurred from mid-January to mid-February 2025. To ensure ethical integrity, several measures were implemented throughout the data collection process. Participants were informed at the end of the survey that their data would be used exclusively for this research and would not be shared with third parties. Additionally, anonymity was guaranteed, as no personally identifiable information was collected, and all responses were treated confidentially.

Data were collected through a survey completed by 71 respondents. The analysis was carried out using R, beginning with data cleaning to ensure accuracy and consistency. After refining the dataset and excluding incomplete responses, a final sample of 41 participants was retained for analysis. Statistical analysis included the Wilcoxon signed-rank test to assess within-subject label effects, ordinal logistic regression to examine the influence of demographic variables, and Fisher’s Exact Tests to evaluate label consistency and associations with health perceptions.

#### **4. Findings and Discussion**

To examine whether labeling had an impact on preferences between "The Vegetarian Choice" and "The Healthy Choice," the Wilcoxon signed-rank test was employed. The test yielded a p-value of 0.484, indicating no significant difference between the two labels. While the raw frequencies showed some variations (Figure 1), these were not robust enough to reject the null hypothesis.

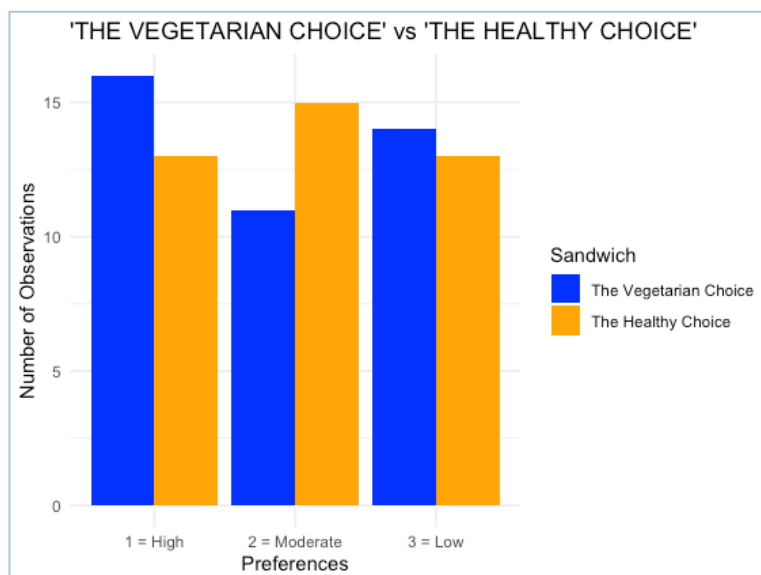


Figure 1. Preference comparison between “The Vegetarian Choice” and “The Healthy Choice”.

This finding challenges the notion that vegetarian labeling deters consumer preference due to stigma. A potential contributing factor is the cultural background of the respondents. Given that the survey was conducted exclusively among Italian participants, the results may reflect broader dietary habits and attitudes prevalent in Italy. As a matter of fact, several studies highlight that traditional Italian cuisine naturally incorporates a higher proportion of vegetables, legumes, and grains compared to others (Bach-Faig et al., 2011; Zampollo et al., 2012). This conclusion is further supported by the finding that 67% of participants who initially preferred a vegetarian sandwich continued to do so even after the “vegetarian” label was applied. This preference remained consistent, and the association was statistically significant (Fisher’s test,  $p = 0.02596$ ), indicating a degree of stability in vegetarian choice regardless of labeling.

Subsequently, an ordinal logistic regression model was conducted to examine whether demographic factors influenced participants’ preferences for “The Vegetarian Choice” sandwich. The analysis revealed no statistically significant effects of age, gender, or education level on label preference. However, the directionality of the coefficients suggested several notable trends, as shown in Table 1. Participants aged 25-34 and those over 55 appeared more inclined toward vegetarian options. This finding contrasts with prior research, which has typically associated vegetarianism with younger individuals motivated by environmental or ethical concerns (Ruby & Heine, 2012). Additionally, male respondents showed a slightly stronger preference for “The Vegetarian Choice,” a surprising result given that previous studies often highlight stronger plant-based preferences among women (Rozin et al., 2012). This could suggest that gendered dietary patterns are less pronounced within this sample, or it may reflect a broader cultural shift as plant-based diets become more normalized. Lastly, preference for the labeled vegetarian option did not increase consistently with education level. Participants with professional school certificates showed the highest preference, followed by high school graduates. While this may align with studies suggesting that individuals with lower education levels sometimes consume more plant-based foods due to cost considerations (Darmon & Drewnowski, 2008), it stands in contrast to other findings that link higher education with greater health awareness and dietary restraint (Kearney et al., 2000).

Table 1. Ordinal logistic regression results predicting preference for “The Vegetarian Choice”.

Independent Variable	Coefficient $\beta$	Std. Error	t-value
Age 25-34	1,0141	0,8979	1,1294
Age 35-44	-1,423	1,6642	-0,8551
Age 45-54	-1,6797	1,3627	-1,2326
Age 55+	0,5159	1,923	0,2683
Male	0,934	1,3856	0,6741
Professional School Certificate	3,5804	2,7453	1,3042
High School Diploma	2,1748	1,606	1,3542
Bachelor’s/Master’s/Single-Cycle Degree	2,2402	1,7437	1,2847

**Model:** Ordinal Logistic Regression  
**Dependent variable:** Preference for 'The Vegetarian Choice'  
**Residual Deviance:** 77.90  
**AIC:** 97.90  
**Sample size (N):** 41

Regarding health-consciousness, participants rating health as highly important were more likely to prefer “The Healthy Choice” (Figure 2). This aligns with studies suggesting that individuals with greater health consciousness are more likely to choose foods perceived as beneficial to well-being (Steinhauser et al., 2013). However, despite this directional trend, the relationship between self-reported health importance and label preference did not reach statistical significance (Fisher’s test,  $p = 0.3682$ ). This suggests that while health orientation may influence food choices in some contexts, it was not a decisive factor in shaping preferences within this sample.

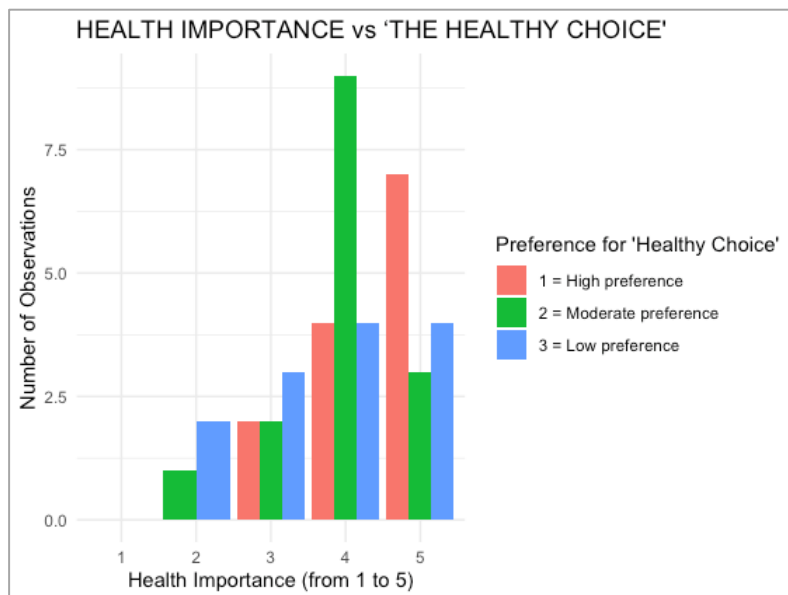


Figure 2. Health importance compared to the preference for “The Healthy Choice”.

## 5. Conclusions

The findings of this research provide valuable insights into the role of linguistic nudges in influencing food choices and promoting plant-based diets.

The main outcome indicates that labeling a sandwich as “The Healthy Choice” rather than “The Vegetarian Choice” did not result in a statistically significant shift in preference, as evidenced by the results of the Wilcoxon Signed-Rank Test. This suggests that while health is generally regarded as a desirable attribute in food choices, it may not be compelling enough to override other factors such as taste expectations, familiarity, or ingrained dietary habits. These findings align with previous research indicating that health-oriented messaging does not universally enhance food appeal and, in some cases, may even deter consumers due to perceived trade-offs between healthiness and sensory enjoyment.

Another key finding of the study is the apparent absence of stigmatization toward vegetarian food among respondents. Contrary to extensive literature suggesting that vegetarian diets are often socially stigmatized, the results of this survey did not reveal a strong aversion to explicitly labeled vegetarian options. In fact, a substantial portion of participants ranked “The Vegetarian Choice” as their most preferred option. This deviation from previous research may be attributed to cultural factors, as the study was conducted in an Italian context, where plant-based ingredients are widely integrated into traditional cuisine. The cultural acceptance of plant-based foods in Mediterranean dietary patterns could explain why respondents did not exhibit the resistance to vegetarian labeling that has been documented in other Western contexts.

Interestingly, gender-related patterns also diverged from conventional expectations: male respondents in this sample were more likely than females to prefer the vegetarian option. This outcome challenges established associations that typically link plant-based diets more strongly with women, suggesting a possible shift in social perceptions of vegetarianism toward broader gender inclusivity.

Taken together, these results highlight an evolving landscape of consumer preferences that may reflect broader cultural openness and changing gender norms. While the framing used in this study did not significantly alter choice behavior, the lack of stigma toward vegetarian options and the gender reversal in preferences indicate a growing normalization of plant-based diets within this sample.

From a policy perspective, these conclusions underscore the challenges of relying solely on linguistic nudges to alter entrenched dietary preferences. While behavioral interventions such as nudges are promising due to their non-coercive nature, they may need to be complemented by structural changes, such as increasing the availability and accessibility of plant-based options or implementing educational campaigns that target consumer perceptions of vegetarian meals. Future policies aimed at reducing meat consumption should consider a combination of behavioral and economic incentives to achieve meaningful change.

Looking ahead, there are several promising directions for future research. Given the mixed results of linguistic nudges in this study, further investigations could explore how these interventions interact with other behavioral strategies, such as default options, social norm messaging, or financial incentives. Additionally, the experimental setting of this research doesn't fully replicate real-world decision-making processes, where multiple factors, including price, taste, and convenience, influence food choices; for this reason, future research could focus on field experiments in restaurant or grocery store environments, which could provide more valid insights into the impact of linguistic nudges on stirring consumers to more sustainable behaviors. Moreover, longitudinal studies could be applied to assess whether repeated exposure to nudges leads to more sustained changes in dietary habits over time. Another avenue worth exploring is the cultural dimension of linguistic framing, how different linguistic cues resonate with consumers across various cultural contexts and whether certain framing techniques are more effective in specific regions or demographic groups.

Ultimately, this study contributes to the growing body of literature on behavioral interventions for sustainable food consumption. While linguistic nudges alone may not be a perfect solution for reducing meat consumption, they offer a valuable tool in a broader behavioral toolkit. By refining these interventions and integrating them with complementary strategies, future research and policy initiatives can work towards fostering more sustainable dietary patterns, addressing both environmental and public health challenges in the process.

**Data Availability:** All data used in this study were collected and analyzed by the authors and are available upon request.

**Declaration for Human Participants:** This study was conducted in accordance with the ethical principles outlined by the MUR (Italian Ministry of University and Research) for research involving human subjects. Participants were informed about the purpose of the research, provided voluntary consent, and their data was collected and analyzed anonymously.

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### References:

1. Bach-Faig, A., Berry, E. M., Lairon, D., Reguant, J., Trichopoulou, A., Dernini, S., ... & Serra-Majem, L. (2011). Mediterranean diet pyramid today. Science and cultural updates. *Public Health Nutrition*, *14*(12A), 2274-2284.
2. Bacon, L., & Krpan, D. (2018). (Not) Eating for the environment: The impact of restaurant menu design on vegetarian food choice. *Appetite*, *125*, 190-200.
3. Bastian, B., & Loughnan, S. (2017). Resolving the meat-paradox: A motivational account of morally troublesome behavior and its maintenance. *Personality and Social Psychology Review*, *21*(3), 278-299.
4. Bianchi, F., Dorsel, C., Garnett, E., Aveyard, P., & Jebb, S. A. (2018). Interventions targeting conscious determinants of human behaviour to reduce the demand for meat: A systematic review with qualitative comparative analysis. *International Journal of Behavioral Nutrition and Physical Activity*, *15*, 1-25.
5. Chandon, P., & Wansink, B. (2012). Does food marketing need to make us fat? A review and solutions. *Nutrition reviews*, *70*(10), 571-593.
6. Darmon, N., & Drewnowski, A. (2008). Does social class predict diet quality? *The American Journal of Clinical Nutrition*, *87*(5), 1107-1117.
7. De Groot, J. I. M. (2022). The effectiveness of normative messages to decrease meat consumption: The superiority of dynamic normative messages framed as a loss. *Frontiers in Sustainability*, *3*, 968201.
8. Fiddes, N. (1991). *Meat: A natural symbol*. Routledge.
9. Gerber, P. J., Steinfeld, H., Henderson, B., Mottet, A., Opio, C., Dijkman, J., ... & Tempio, G. (2013). *Tackling climate change through livestock – A global assessment of emissions and mitigation opportunities*. Food and Agriculture Organization of the United Nations (FAO).
10. Godar, J., Gardner, T. A., Tizado, E. J., & Pacheco, P. (2014). Actor-specific contributions to the deforestation slowdown in the Brazilian Amazon. *Proceedings of the National Academy of Sciences*, *111*(43), 15591-15596.
11. Kearney, M., Kearney, J. M., Dunne, A., & Gibney, M. J. (2000). Sociodemographic determinants of perceived influences on food choice in a nationally representative sample of Irish adults. *Public health nutrition*, *3*(2), 219-226.
12. Krpan, D., & Houtsma, N. (2020). To veg or not to veg? The impact of framing on vegetarian food choice. *Journal of Environmental Psychology*, *67*, 101391.
13. Kurz, V. (2018). Nudging to reduce meat consumption: Immediate and persistent effects of an intervention at a university restaurant. *Journal of Environmental Economics and Management*, *90*, 317-341.
14. Lakoff, G. (2004). *Don't think of an elephant: Know your values and frame the debate*. Chelsea Green Publishing.
15. Markowski, K. L., & Roxburgh, S. (2019). "If I became a vegan, my family and friends would hate me": Anticipating vegan stigma as a barrier to plant-based diets. *Appetite*, *135*, 1-9.

16. Marshall, B. M., & Levy, S. B. (2011). Food animals and antimicrobials: Impacts on human health. *Clinical Microbiology Reviews*, 24(4), 718-733.
17. Mekonnen, M. M., & Hoekstra, A. Y. (2012). A global assessment of the water footprint of farm animal products. *Ecosystems*, 15(3), 401-415.
18. Minson, J. A., & Monin, B. (2012). Do-gooder derogation: Disparaging morally motivated minorities to defuse anticipated reproach. *Social Psychological and Personality Science*, 3(2), 200-207.
19. Pan, A., Sun, Q., Bernstein, A. M., Schulze, M. B., Manson, J. E., Stampfer, M. J., ... & Hu, F. B. (2012). Red meat consumption and mortality: Results from two prospective cohort studies. *Archives of Internal Medicine*, 172(7), 555-563.
20. Rozin, P., Hormes, J. M., Faith, M. S., & Wansink, B. (2012). Is meat male? A quantitative multimethod framework to establish metaphoric relationships. *Journal of Consumer Research*, 39(3), 629-643.
21. Ruby, M. B., & Heine, S. J. (2011). Meat, morals, and masculinity. *Appetite*, 56(2), 447-450.
22. Ruby, M. B., & Heine, S. J. (2012). Too close to home. Factors predicting meat avoidance. *Appetite*, 59(1), 47-52.
23. Satija, A., Bhupathiraju, S. N., Spiegelman, D., Chiuve, S. E., Manson, J. E., Willett, W., ... & Hu, F. B. (2017). Healthful and unhealthful plant-based diets and the risk of coronary heart disease in US adults. *Journal of the American College of Cardiology*, 70(4), 411-422.
24. Steinhauser, J., Janssen, M., & Hamm, U. (2019). Consumers' purchase decisions for products with nutrition and health claims: What role do product category and gaze duration on claims play?. *Appetite*, 141, 104337.
25. Thaler, R. H., & Sunstein, C. R. (2008). *Nudge: Improving decisions about health, wealth, and happiness*. Yale University Press.
26. Thibodeau, P. H., & Boroditsky, L. (2011). Metaphors we think with: The role of metaphor in reasoning. *PLoS ONE*, 6(2), e16782.
27. Turnwald, B. P., Boles, D. Z., & Crum, A. J. (2017). Association between indulgent descriptions and vegetable consumption: Twisted carrots and dynamite beets. *JAMA Internal Medicine*, 177(8), 1216-1218.
28. Wansink, B., Van Ittersum, K., & Painter, J. E. (2005). How descriptive food names bias sensory perceptions in restaurants. *Food quality and preference*, 16(5), 393-400.
29. Zampollo, F., Wansink, B., Kniffin, K. M., Shimizu, M., & Omori, A. (2012). Looks good enough to eat: How food plating preferences differ across cultures and continents. *Cross-Cultural Research*, 46(1), 31-49.