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Consumer Acceptance of Gene-Edited Food Products: Insights from Recent Research

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Introduction

Gene editing is changing the way we grow food, and it has the potential to improve food security, make farming more sustainable, and increase crop resilience to climate change. However, how consumers feel about gene-edited (GE) products is critical for their success in the market. Recent research from Cornell University and other institutions looked into consumer attitudes toward gene-edited food, focusing on a favorite snack: potato chips. Interestingly, both main ingredients in this widely consumed processed food - potatoes and vegetable oil - can come from gene-edited varieties. The study found that while many consumers are initially cautious about buying gene-edited foods, their interest increases when they learn about health or environmental benefits associated with these products. This finding highlights the importance of clearly communicating the advantages of gene editing to help build consumer acceptance. Another key result of the study suggests that consumers care equally about the edited ingredient – be it potatoes or vegetable oil – which has important implications for food labeling recommendations.

The Study

To gauge consumer preferences, researchers surveyed adult consumers across the U.S., examining their willingness to purchase potato chips made with gene-edited versus conventionally bred ingredients. Participants were shown different product descriptions: 1) some included gene-edited ingredients while others didn’t, 2) one scenario highlighted gene-edited potatoes and another focused on gene-edited vegetable oil, and 3) descriptions either included or omitted claims about health and environmental benefits of the gene-edited ingredients.

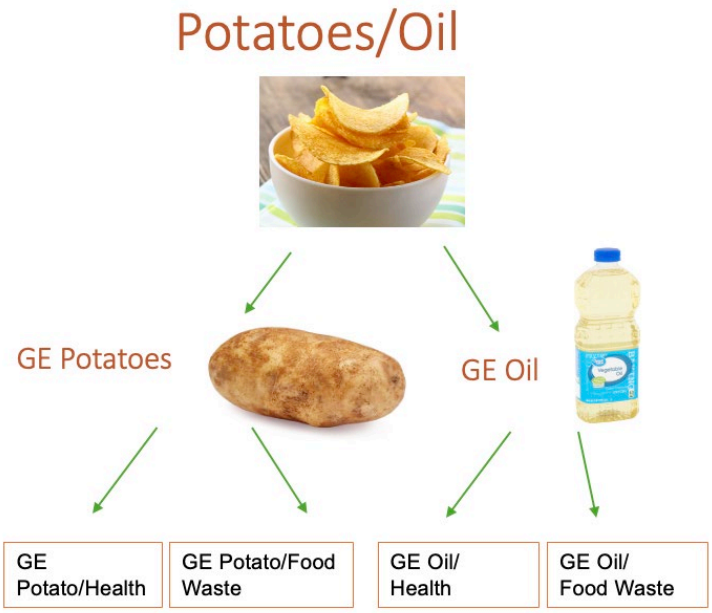
Key Findings

• **Hesitation to purchase:** Many consumers showed reluctance to buy potato chips with gene-edited ingredients, indicating that labeling these products as gene-edited may negatively impact their choices.

• **Ingredient impact:** The response from consumers was consistent whether the gene editing was applied to potatoes or vegetable oil. This suggests that the concept of gene editing itself is what concerns consumers, not just its specific application to a particular ingredient.

• **Importance of benefits:** When informed about the potential health and environmental benefits of gene editing, consumers were more inclined to consider purchasing gene-edited products. However, these benefits alone weren't enough to completely sway those who were

skeptical. Notably, prospects of health benefits appealed more to consumers than environmental ones.



Implications for Marketing and Policy

The findings from this study highlight critical areas for food producers and policymakers. Consumer skepticism about gene-edited products remains a significant obstacle, but effective communication and education could foster trust and acceptance. It's essential to focus on how product information is presented. While being transparent is important, showcasing the direct benefits to consumers – like better health outcomes – can help ease concerns.

Conclusion

Gene-edited foods can offer real advantages, such as reducing food waste and enhancing nutritional content. However, widespread consumer hesitance underscores the need for straightforward labeling and communication strategies. Educating consumers and framing gene-edited products in terms of their direct consumer benefits is essential for acceptance in the marketplace.

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For more information about this project, please contact Elena Krasovskaia (ek558@cornell.edu) or Bradley J. Rickard (b.rickard@cornell.edu).

More details from this study can be found in the peer-reviewed research article available here: https://www.cambridge.org/core/journals/agricultural-and-resource-economics-review/article/food-labeling-ingredient-exemptions-and-product-claims/30FF7292DC30C96E82BF194F78482DE2

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