An Influencer’s Impact: How Trust May Shape Food Demand

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1/24/24
Dept, of Agricultural, Environmental, and Development Economics
Outline


2. How does trust impact food demand?

3. Discuss the current role of influencers in food demand.

4. Policy Implications of influencers and food demand.
Food Demand Trends

USDA ERS report that food prices are expected to increase by 1.2%
  • Decrease in food-at-home prices by 0.6%
  • Increase in food-away-from-home by 4.9%

Online grocery delivery in U.S.
  • Studied shift towards during and after COVID-19 pandemic (Shen et al., 2022)
U.S. Food Prices

Source: Center for Food Demand Analysis and Sustainability
Food Demand

**Figure 1.** Brand-name vs. Generic or Store-brand Choices by Food Category and Price Discount, Sept. 2023

Source: Center for Food Demand Analysis and Sustainability
Food Demand

Food purchasing decisions are shifting towards focus on food safety and quality (Wu et al., 2021)

There are generational differences in food quality preferences

Source: Center for Food Demand Analysis and Sustainability
Figure 20. Share of Consumers who ‘Somewhat Agree’ or ‘Strongly Agree’ with Claims about Food by Generational Cohorts, 2023

Source: Center for Food Demand Analysis and Sustainability
Perceived Quality of Food

Information Economics

• Search goods – Easy to judge actual value and price
  • Appearance
  • Brand labels

• Experience goods – Can identify price but not the value until consumption
  • Taste
  • Texture

• Credence goods – Can not be judged or assessed independently
  • Organic
  • Nutrition
  • Cage free
How would consumers react to specific animal welfare regulations that affect pork prices?

**Consumer Food Insights**
*August 2023*

![Bar chart showing consumer reaction to General Price Increase and Prop 12 Price Increase.]

- **General Price Increase**
  - Decrease spending (%): 32%
  - No Change (%): 57%
  - Increase spending (%): 10%
  - % Increase - % Decrease: -22%

- **Prop 12 Price Increase**
  - Decrease spending (%): 30%
  - No Change (%): 50%
  - Increase spending (%): 13%
  - % Increase - % Decrease: -17%

*Source: Center for Food Demand Analysis and Sustainability*
Food Demand

U.S. organic food retail sales by category, 2001–21

Information Asymmetry

Shoppers tend to lack the expertise or time to identify the appropriate product

Gives experts an opportunity to take advantage of consumers for profits (Fong et al., 2022)

NielsenIQ and Food Industry Association report

- Roughly 66% of food shoppers would switch to brands for one that provides more information (Food transparency)
- 80% prefer values-based information, certification, and allergen information
### Figure 15. Frequency of Consumer Shopping and Eating Habits by Generational Cohorts, Jan. 2022 - Dec. 2023

<table>
<thead>
<tr>
<th>Behavior</th>
<th>Gen Z</th>
<th>Millennial</th>
<th>Gen X</th>
<th>Boomer+</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chose generic foods over brand-name foods</td>
<td>3.5</td>
<td>3.5</td>
<td>3.4</td>
<td>3.1</td>
</tr>
<tr>
<td>Chose local foods over non-local foods</td>
<td>3.2</td>
<td>3.3</td>
<td>3.0</td>
<td>2.9</td>
</tr>
<tr>
<td>Chose wild-caught fish over farm-raised fish</td>
<td>3.1</td>
<td>3.2</td>
<td>2.9</td>
<td>2.7</td>
</tr>
<tr>
<td>Chose grass-fed beef over conventional beef</td>
<td>3.1</td>
<td>3.2</td>
<td>2.9</td>
<td>2.5</td>
</tr>
<tr>
<td>Chose cage-free eggs over conventional eggs</td>
<td>3.1</td>
<td>3.2</td>
<td>2.8</td>
<td>2.4</td>
</tr>
<tr>
<td>Chose organic foods over non-organic foods</td>
<td>3.0</td>
<td>3.2</td>
<td>2.8</td>
<td>2.3</td>
</tr>
<tr>
<td>Chose plant-based proteins over animal proteins</td>
<td>2.9</td>
<td>3.0</td>
<td>2.5</td>
<td>2.0</td>
</tr>
</tbody>
</table>

**Mean Score**
- **5**: Always
- **4**: Often
- **3**: Sometimes
- **2**: Rarely
- **1**: Never

Source: Center for Food Demand Analysis and Sustainability
### Top barriers to plant-based foods consumption 2022

<table>
<thead>
<tr>
<th>Reasons why consumers haven't tried</th>
<th>Plant-based meat</th>
<th>Plant-based dairy</th>
</tr>
</thead>
<tbody>
<tr>
<td>Taste</td>
<td>51%</td>
<td>49%</td>
</tr>
<tr>
<td>Cost</td>
<td>25%</td>
<td>23%</td>
</tr>
<tr>
<td>No particular reason</td>
<td>24%</td>
<td>26%</td>
</tr>
<tr>
<td>Processedness</td>
<td>16%</td>
<td>8%</td>
</tr>
<tr>
<td>Quality</td>
<td>12%</td>
<td>9%</td>
</tr>
<tr>
<td>Appearance</td>
<td>10%</td>
<td>5%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Reasons why consumers tried once or twice but didn't continue</th>
<th>Plant-based meat</th>
<th>Plant-based dairy</th>
</tr>
</thead>
<tbody>
<tr>
<td>Taste</td>
<td>46%</td>
<td>50%</td>
</tr>
<tr>
<td>Didn't meet expectations</td>
<td>35%</td>
<td>25%</td>
</tr>
<tr>
<td>Cost</td>
<td>30%</td>
<td>32%</td>
</tr>
<tr>
<td>Texture</td>
<td>26%</td>
<td>15%</td>
</tr>
<tr>
<td>Processedness</td>
<td>14%</td>
<td>9%</td>
</tr>
<tr>
<td>Too many ingredients</td>
<td>6%</td>
<td>6%</td>
</tr>
</tbody>
</table>

*Source: FMI, The Power of Plant-Based Foods and Beverages 2022 © 2023 The Good Food Institute, Inc.*
Key plant-based food sales metrics and purchase dynamics
2022

<table>
<thead>
<tr>
<th></th>
<th>Dollar sales</th>
<th>1-yr. dollar growth</th>
<th>3-yr. dollar growth</th>
<th>Dollar share</th>
<th>Unit sales</th>
<th>1-yr. unit growth</th>
<th>Unit share</th>
<th>Household penetration</th>
<th>Repeat rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total plant-based foods</td>
<td>$8.0 B</td>
<td>7%</td>
<td>44%</td>
<td>1.4%*</td>
<td>1.9 B</td>
<td>-3%</td>
<td>1.2%*</td>
<td>60%</td>
<td>80%</td>
</tr>
<tr>
<td>Plant-based meat</td>
<td>$1.4 B</td>
<td>-1%</td>
<td>43%</td>
<td>1.3%**</td>
<td>255 MM</td>
<td>-8%</td>
<td>1.7%**</td>
<td>18%</td>
<td>63%</td>
</tr>
<tr>
<td>Plant-based milk</td>
<td>$2.8 B</td>
<td>9%</td>
<td>36%</td>
<td>15.3%</td>
<td>749 MM</td>
<td>-2%</td>
<td>14.7%</td>
<td>41%</td>
<td>76%</td>
</tr>
</tbody>
</table>

Sales data note: The data presented in this graph is based on custom GFI and PIBFA plant-based categories that were created by refining standard SPINS categories. Due to the custom nature of these categories, the presented data will not align with standard SPINS categories. Share values for the total plant-based foods category are out of total edibles sales (frozen, grocery, refrigerated, and protein powder/based). Share values of individual plant-based categories are out of their respective total plant-based plus animal-based category. **SPINS does not report non-UPC animal-based meat counter sales. To calculate the plant-based meat share of the total meat category, dollar and unit volume assumptions for non-UPC animal-based meat counter sales are added to SPINS UPC animal-based meat sales. Household data note: SPINS uses a separate process from the sales data to pull household panel data, which may result in minor category differences.

Trust

“Trust is an important lubricant of a social system. It is extremely efficient; it saves a lot of trouble to have a fair degree of reliance on other people's word”

Dr. Kenneth Arrow
Nobel Prize winner in Economics (1972)
Trust

Based on reputation and reliability
   Past experiences
Consumer satisfaction under a realm of uncertainty
   • Brand
   • Product
   • Food supply chain

Public perception and first-person experiences

Difficult to quantify
Trust

Betrayal aversion (Bohnet et al., 2008)

Some low prices may cause consumers to question the quality of items

Perceived value of a product - Subjective
Actual value of a product - Experienced

<table>
<thead>
<tr>
<th>Scenario</th>
<th>Effects on Trust over Time</th>
<th>Product Outcome</th>
</tr>
</thead>
<tbody>
<tr>
<td>Perceived Value &lt; Actual Value</td>
<td>Increases</td>
<td>Increases repurchase power</td>
</tr>
<tr>
<td>Actual Value &lt; Perceived Value</td>
<td>Decrease</td>
<td>Market of Lemons</td>
</tr>
</tbody>
</table>
Supply Chain Disruption

Input Supplier

Producer

Processer

Retailer

Consumer
Blue Bell Ice Cream Case

Fined $19.35 million

Study found that consumer’s loyalty and the company’s transparency on the process increased consumers trust and aided their adjustments after the crisis (Opat et al., 2018).

Source: Center of Disease Control and Prevention
<table>
<thead>
<tr>
<th>Activity</th>
<th>Gen Z</th>
<th>Millennial</th>
<th>Gen X</th>
<th>Boomer+</th>
</tr>
</thead>
<tbody>
<tr>
<td>Checked the Use-By/sell-by date at the store</td>
<td>3.9</td>
<td>4.0</td>
<td>4.0</td>
<td>4.1</td>
</tr>
<tr>
<td>Checked the nutrition label before buying new foods</td>
<td>3.3</td>
<td>3.5</td>
<td>3.4</td>
<td>3.4</td>
</tr>
<tr>
<td>Checked for natural or clean labels</td>
<td>3.2</td>
<td>3.4</td>
<td>3.0</td>
<td>2.6</td>
</tr>
<tr>
<td>Checked where my food originated</td>
<td>3.1</td>
<td>3.2</td>
<td>2.9</td>
<td>2.7</td>
</tr>
<tr>
<td>Checked for food recalls</td>
<td>3.2</td>
<td>3.2</td>
<td>2.9</td>
<td>2.6</td>
</tr>
<tr>
<td>Checked for GMO ingredients</td>
<td>2.9</td>
<td>3.1</td>
<td>2.9</td>
<td>2.5</td>
</tr>
<tr>
<td>Checked how my food was produced</td>
<td>3.1</td>
<td>3.2</td>
<td>2.8</td>
<td>2.4</td>
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</table>

Source: Center for Food Demand Analysis and Sustainability
Awareness of Products
Demographic profiles and party identification of regular social media news consumers in the U.S.

% of each social media site's **regular** news consumers who are ...

<table>
<thead>
<tr>
<th></th>
<th>Facebook</th>
<th>YouTube</th>
<th>Twitter</th>
<th>Instagram</th>
<th>Reddit</th>
<th>TikTok</th>
<th>LinkedIn</th>
<th>Snapchat</th>
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</thead>
<tbody>
<tr>
<td><strong>Men</strong></td>
<td>35%</td>
<td>56</td>
<td>56</td>
<td>36</td>
<td>67</td>
<td>30</td>
<td>54</td>
<td>40</td>
</tr>
<tr>
<td><strong>Women</strong></td>
<td>64%</td>
<td>43</td>
<td>43</td>
<td>63</td>
<td>31</td>
<td>68</td>
<td>44</td>
<td>59</td>
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<table>
<thead>
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<th>Age Group</th>
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<th>Snapchat</th>
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<tbody>
<tr>
<td>Ages 18-29</td>
<td>23</td>
<td>27</td>
<td>43</td>
<td>44</td>
<td>44</td>
<td>52</td>
<td>25</td>
<td>63</td>
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<tr>
<td>30-49</td>
<td>41</td>
<td>40</td>
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<td>37</td>
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<td>32</td>
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<td>50-64</td>
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<td>22</td>
<td>14</td>
<td>13</td>
<td>8</td>
<td>12</td>
<td>20</td>
<td>3</td>
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<tr>
<td>65+</td>
<td>14</td>
<td>11</td>
<td>5</td>
<td>5</td>
<td>1</td>
<td>2</td>
<td>8</td>
<td>1</td>
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</table>

<table>
<thead>
<tr>
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<th>TikTok</th>
<th>LinkedIn</th>
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<tbody>
<tr>
<td>High school or less</td>
<td>41</td>
<td>37</td>
<td>25</td>
<td>33</td>
<td>26</td>
<td>42</td>
<td>18</td>
<td>50</td>
</tr>
<tr>
<td>Some college</td>
<td>31</td>
<td>35</td>
<td>31</td>
<td>36</td>
<td>33</td>
<td>40</td>
<td>24</td>
<td>35</td>
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<tr>
<td>College+</td>
<td>28</td>
<td>28</td>
<td>43</td>
<td>30</td>
<td>41</td>
<td>17</td>
<td>57</td>
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<th>Race</th>
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<th>Twitter</th>
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<th>Reddit</th>
<th>TikTok</th>
<th>LinkedIn</th>
<th>Snapchat</th>
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<tbody>
<tr>
<td>White</td>
<td>60</td>
<td>46</td>
<td>51</td>
<td>36</td>
<td>54</td>
<td>38</td>
<td>45</td>
<td>31</td>
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<tr>
<td>Black</td>
<td>11</td>
<td>16</td>
<td>14</td>
<td>20</td>
<td>7</td>
<td>18</td>
<td>18</td>
<td>21</td>
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<tr>
<td>Hispanic</td>
<td>20</td>
<td>24</td>
<td>22</td>
<td>33</td>
<td>21</td>
<td>34</td>
<td>20</td>
<td>37</td>
</tr>
<tr>
<td>Asian*</td>
<td>5</td>
<td>10</td>
<td>9</td>
<td>7</td>
<td>15</td>
<td>8</td>
<td>13</td>
<td>7</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Political Affiliation</th>
<th>Facebook</th>
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<th>Twitter</th>
<th>Instagram</th>
<th>Reddit</th>
<th>TikTok</th>
<th>LinkedIn</th>
<th>Snapchat</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rep/Lean Rep</td>
<td>44</td>
<td>41</td>
<td>30</td>
<td>33</td>
<td>23</td>
<td>32</td>
<td>41</td>
<td>32</td>
</tr>
<tr>
<td>Dem/Lean Dem</td>
<td>52</td>
<td>54</td>
<td>67</td>
<td>62</td>
<td>74</td>
<td>63</td>
<td>54</td>
<td>61</td>
</tr>
</tbody>
</table>

*Asian adults were interviewed in English only.

Note: Twitch and WhatsApp not shown due to small sample size. White, Black and Asian adults include those who report being only one race and are not Hispanic; Hispanics are of any race.


*News Consumption Across Social Media in 2021*
Influencers

An individual or entity that inspires or guides the actions of others

Direct communication with consumers

Followers/fans are relatively inelastic to their promoted products

- Signal theory
- Naïve theory

Source: Forbes Article
Influencers

HOW LIKELY ARE YOU TO BE INFLUENCED OR TO PURCHASE A BRAND, PRODUCT OR SERVICE THAT IS USED WITHIN THE STREAMING VIDEO CONTENT ITSELF?

Source: Nielsen Total Audience Report
Influencers Characteristics

Expertise

Likeability/Attractiveness

Trustworthiness

Goodwill

Similarity
Enter Instagram username and tap Enter!

2,026 posts
121,286 followers

Estimated Cost Per Post
$361.56 - $602.60

Engagement Rate
1.43%

5,701 posts
334M followers

Estimated Cost Per Post
$663,432 - $1M

Engagement Rate
0.41%

Source: Influencer Marketing Hub
Influencers

Types

1. Social Media Influencers
   • Sponsored content, post captions, and giveaways

2. User-generated content (UGC)
   • Created by customers/employees (reviews and ratings)

3. Content creators
   • Creates entertaining or educational material
Studies on Influencer

Social media Influencers’ positive correlation to consumer attitude towards brands is partial based on trust (Nafees et al., 2021)

Influencer marketing increases children’s immediate intake of the promoted snack relative to an alternative brand (Coates et al., 2019)

UGC’s show positive correlation with impulse purchases for Gen Z females (Djafarova & Bowes, 2021)
Influencer on Healthy Eating

Google Trends of Let’s Move Public Campaign vs. Beyoncé’s song Move Your Body
Food Influencers

- CHEF
- FOOD CRITICS
- FOOD BLOGGERS
- RECIPE CREATORS
- GROCERY STORES
gordonramsayofficial Gordon Ramsay

519 Following 39.9M Followers 654.1M Likes

I cook sometimes too....

Recipes here

www.GordonRamsay.com/links

Videos

Playlists

Recipes

23 posts

Videos

No Idiot Sandwiches w... Let's cook a delicious ... When in Australia...y... Holy Fructose! #affilter This must've been wha... I thought tomato the ...

#duet with
Keith Lee Effect

Shine a light on small business
  • Revive a small business
  • Honest Critiques

• Visits anonymously

• Businesses found real results after visits
  • Dwindling business are sold out of products after receiving post
  • Controversial discussions on business practices

The New York Times

Atlanta’s Dining Scene Feels ‘the Keith Lee Effect’

When Mr. Lee, a TikTok food reviewer with 14 million followers, visited Atlanta, his reviews gave voice to gripes that some have about parts of the city’s dining culture.
Grocery Stores

Whole Foods Local and Emerging Accelerator Program (LEAP)
• Launched 2022
• Provides support for suppliers
  • Mentorship
  • Education
  • Eligible for $25,000 equity investment
• Opportunities
  • Early Growth
  • On the Verge

Link for more information
Food Influencers in Ohio
Cincinnati Eats

Community
- Two foodies: @leahbarryphotography and @megannollphotography
- Sharing eats from the Queen City since 2014
  #cincy eats
Megan Rivers

Personal blog
- inspiring spots within your reach
- food, drinks, playgrounds & life
- triplet mama, a little free-range, a little helicopter
↑ columbus, oh
🔗 linktr.ee/eatplaycbus
Social Media Influencers

gidsgids
Gideon General

Follow

287 Following 1.3M Followers 23.9M Likes

I crave, I make. 🥘

Dayton, OH
gidsgids@asartiststagency.com

Videos

Filipino food
10 posts

Shokugeki Saturday
2 posts

Fried Chicken Friday's
10 posts

Playlists

Filipino style Carbonara

Hot Honey Holsin Chicken

Create effects

© 2024 TikTok
Prime Hydration

- Founded by Logan Paul and KSI
- Drink company
- Reported $1.2 Billion in internal sales by end of 2023
Challenges of Utilizing Influencers

Views ≠ Sales

Deceptive advertising

Everchanging nature
Challenges of Utilizing Influencers

Effective collaborations remain an issue (Chekima et al., 2020)

Need for formalized collaborations to eliminate ambiguity (Syed, Mehmoof, & Qaiser, 2023)

Mixed findings on encouraging healthy eating (Coates. et al., 2019; Hanifawati et al., 2019)

UGC can spread misinformation if not monitored properly (Fake Reviews)
Government’s Role with Influencers

Federal Trade Commission
- Requires disclosure statements for any relationship between Influencers and brands
- Consumer Review Fairness Act
- Proposed a rule for fining and banning fake reviews
Demand-Side Food Policies

MyPlate
• Visual reminder of healthy choices with tips and resources

Supplemental Nutrition Incentive Grant Program (SNAP)
• Largest Food Assistance Program

Gus Schumacher Nutrition Incentive Grant Program (GusNIP)
• Offers additional financial incentives to encourage healthy eating

America’s Healthy Food Financing Initiative (HFFI)
• Provides grants and loans to improve food access in underserved communities
Main Takeaways

If perceived value < actual value, you are building trust in your food product

Product quality, transparency, and awareness are key for building consumers’ trust in food

Influencers can be a powerful tool but require more regulation

Partnerships with health experts and influencers can build trust in a quality food product
Thank you!
Questions?

grant.829@osu.edu
How Much Do Influencers Earn Per Post?

**Instagram**

- Nano-influencers: $10–$100 per post
- Micro-influencers: $100–$500 per post
- Mid-tier influencers: $500–$5,000 per post
- Macro-influencers: $5,000–$10,000 per post
- Mega-influencers: $10,000+ per post
- Celebrities: Varies, but $1+ million isn’t unheard of

Source: Influencer Marketing Hub