Framing a product with the same number of ingredients as having fewer ingredients increases consumers’ interest (Studies 1A, 1B, and 7). This occurs because consumers view products with fewer ingredients as more natural. The belief that a product with fewer (vs. more) ingredients is more natural persists even when all ingredients in both products are explicitly natural or organic (Studies 2 – 7). Consumers who have higher (vs. lower) concern for naturalness are more likely to choose a product with fewer ingredients. (Study 8)

**Abstract**

- **Theoretical Motivation:** Naturalness research has focused on the types of ingredients (e.g., GMO, artificial flavorings) and processes (e.g., blending). Are they exhaustive in explaining naturalness?
- **Practical Motivation:** Recently, brands are launching products with an emphasis on how many ingredients they used in the product. Haagen-Dazs Five is a good example. Is this framing strategy effective?

**STUDY 1A – Do consumers prefer a product highlighting the number of ingredients?**

- In Study 1A and 1B, we partnered with real brands and ran Facebook A/B tests to see whether ads framed as having fewer ingredients increases consumers’ interest.
- We found a higher click rate when the ad highlights how many ingredients they used in the product.

**STUDY 1B – Do consumers prefer a product framed as having “few” (vs. “more”) ingredients?**

- We found a higher click rate when the same product is framed as having “few” ingredients.

**STUDIES 2-6 – Demonstrating a heuristic of Fewer ingredients = More Natural**

- Participants reported relative naturalness between two products on a bipolar scale. We tested against the mid point (4). All ingredients were counterbalanced.

  “Which yogurt do you think is more natural?”

<table>
<thead>
<tr>
<th>1 Definitely Raspberry</th>
<th>4 Neutral</th>
<th>7 Definitely Mixed berries</th>
</tr>
</thead>
<tbody>
<tr>
<td>M = 3.32</td>
<td>p &lt; .001</td>
<td></td>
</tr>
</tbody>
</table>

  Effect holds when:
  - Study 2: categories are different – juice and coffee
  - Study 3: vice/virtue is manipulated – ice cream
  - Study 4: the “fewer” product has an artificial ingredient – chocolate
  - Study 5: the flavors are not “mixed” – assorted flavors of gummies
  - Study 6: the number of flavors increases linearly

  - 1-8 assorted flavors of vitamin gummies

**STUDY 7 – Naturalness perceptions mediate the effect of few framing**

- We replicate this effect with purchase likelihood using the stimuli from Study 1B with the M-Turk sample and find the perceptions of naturalness mediate the effect.

  \[ b = .42, \text{SE} = .20, \ t (335) = 2.16, p = .03 \]

  Naturalness Perception

  Indirect effect = .14, 95% CI = [.01, .29]

  Few framing (Vs. more framing)

  Likelihood of purchase

**STUDY 8 – The effect is moderated by consumers’ attitudes towards naturalness**

- Participants reported their concern for naturalness (Siegrist et al. 2008) and made an incentive-compatible choice between two cookies (5 vs. 7 ingredients) from Etsy.

  - Ultimate Chocolate chip cookies
    7 ingredients:
    - Flour, sugar, salt, eggs, butter, chocolate, vanilla
  - Double Stuffed chocolate chip cookies
    5 ingredients:
    - Flour, sugar, chocolate, eggs, butter

  A logit regression analysis showed that those who have higher (vs. lower) concern for naturalness were more likely to choose the five-ingredients (i.e., fewer) chocolate chip cookie.

**Takeaways**

- **The number of ingredients** is an important factor that consumers consider in their decision making.
- Specifically, **few-ingredients framing is more effective** than more-ingredients framing.
- A product with fewer ingredients is perceived as more natural than that with more ingredients.
- The effect of the number of ingredients on perceived naturalness is **robust across different categories** (e.g., yogurt, coffee origin, juice, ice cream, chocolate, vitamin gummies, chocolate chip cookies).
- The effect alters consumers’ decision making.