Evolving Information About Food, Nutrition, and Health Affects the Credibility of Science

Carol Byrd-Bredbenner
Rutgers University

National Academy of Sciences
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Advancing The Science and Practice of Science Communication: Misinformation About Science In The Public Sphere
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Consumer
- Values
- Experiences
- Wants & Needs

Nutrition Gurus
Nutrition Scientists

DEMAND

SUPPLY
1. Build nutrition knowledge base

“If you don't know the background science, any argument can sound convincing”
Cara Rosenbloom, RD 2018

2. Provide red flag detectors
Clear up the conflict

Scientists really don’t know what we should eat to be healthy.
“There is a lot of conflicting information about the foods I should eat or avoid.”

80% Strongly/Somewhat Agree

IFIC 2018 Food & Health Survey
Conflicting Information Effects

Vardeman 2008; Nagler 2014; Jensen 2011; Fiscella 1999
Build trust, sell science

Presentation Techniques
- 2-sided Refutational Approach
- Hedging
Highlights

- Carbohydrate availability in the gut drives *E. coli* Nissle adaptation *in vivo*

- Gut monoclonization selects for glycosyl hydrolases enabling population cross-feeding

- Mutations that enhance mucin utilization are enriched in low-diversity guts

- Prior antibiotic exposure in conventional guts can lead to evolved probiotic resistance

Summary
Build trust, sell science

- 2-sided
- Refutational
- Hedging

Techniques

Connect x 3

- Know their knowledge base and behaviors
- Address wants, values, interests, and motivations to improve “quality of life” as they define it
- Make messages resonate
  - positive
  - personal benefit
  - process
  - pilot
Ultimate test: Will consumers use the accurate communication to live a healthier life?