



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

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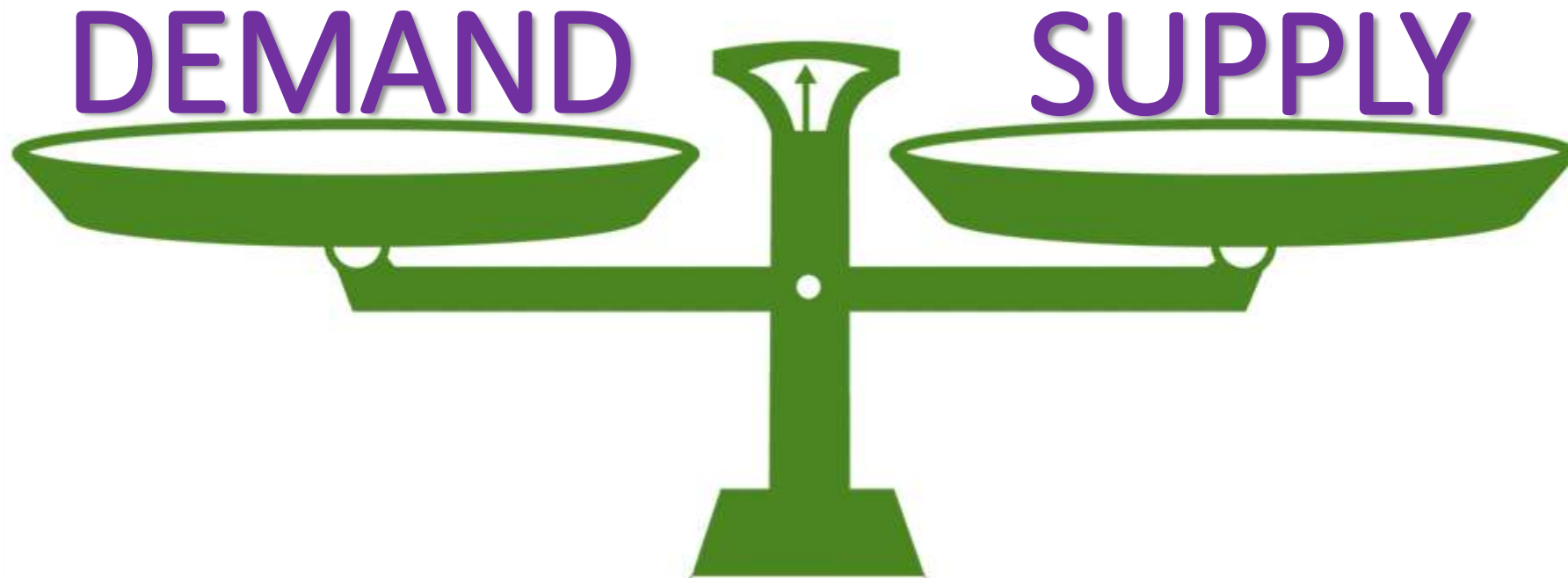
National Academy of Sciences
Arthur M. Sackler Colloquium
*Advancing The Science and Practice of
Science Communication: Misinformation
About Science In The Public Sphere*
April 3, 2019

Consumer

- Values
- Experiences
- Wants & Needs

Nutrition Gurus

Nutrition Scientists





Build nutrition knowledge base

*“If you don't know the background science,
any argument can sound convincing”*

Cara Rosenbloom, RD 2018

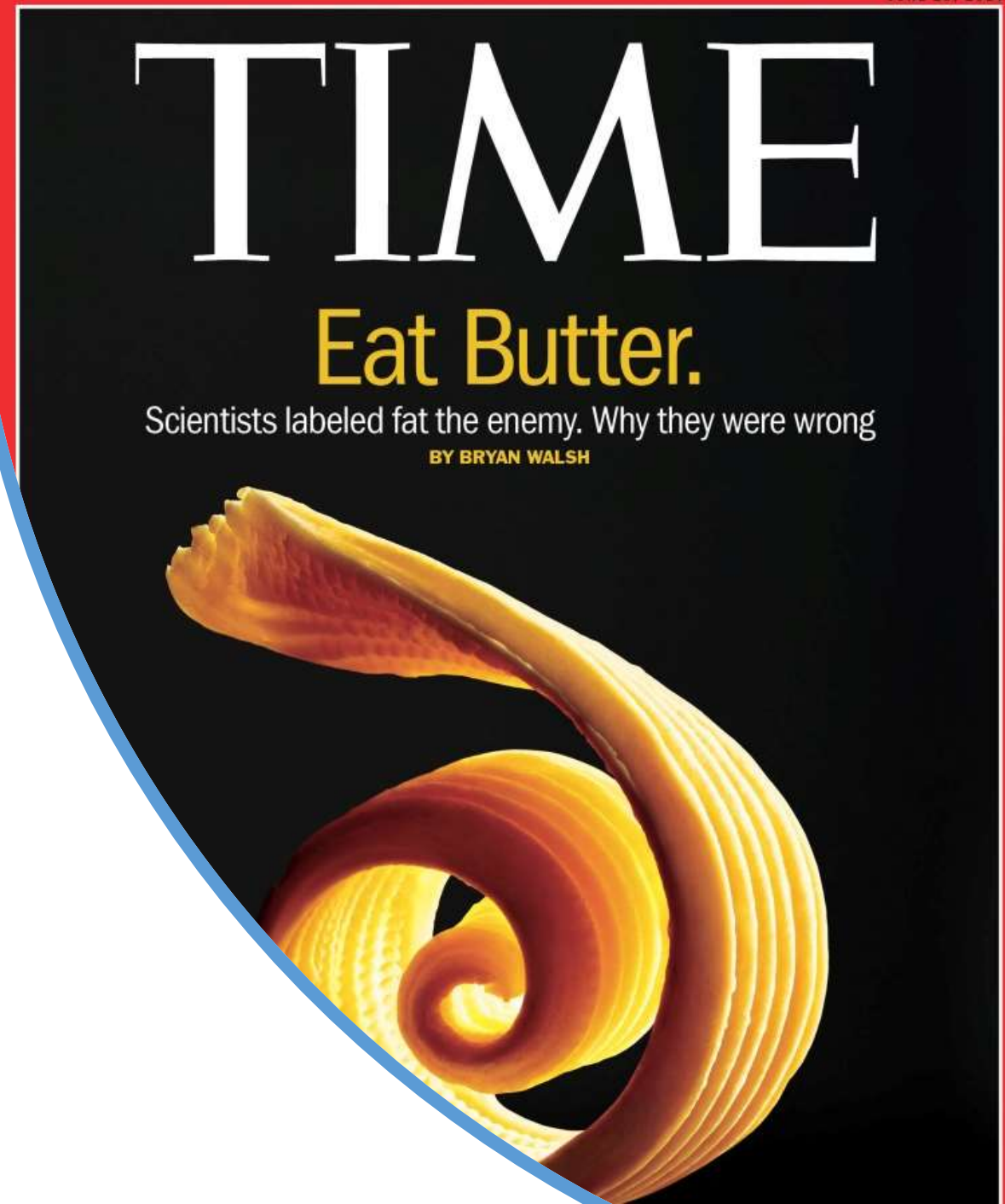


Provide red flag detectors

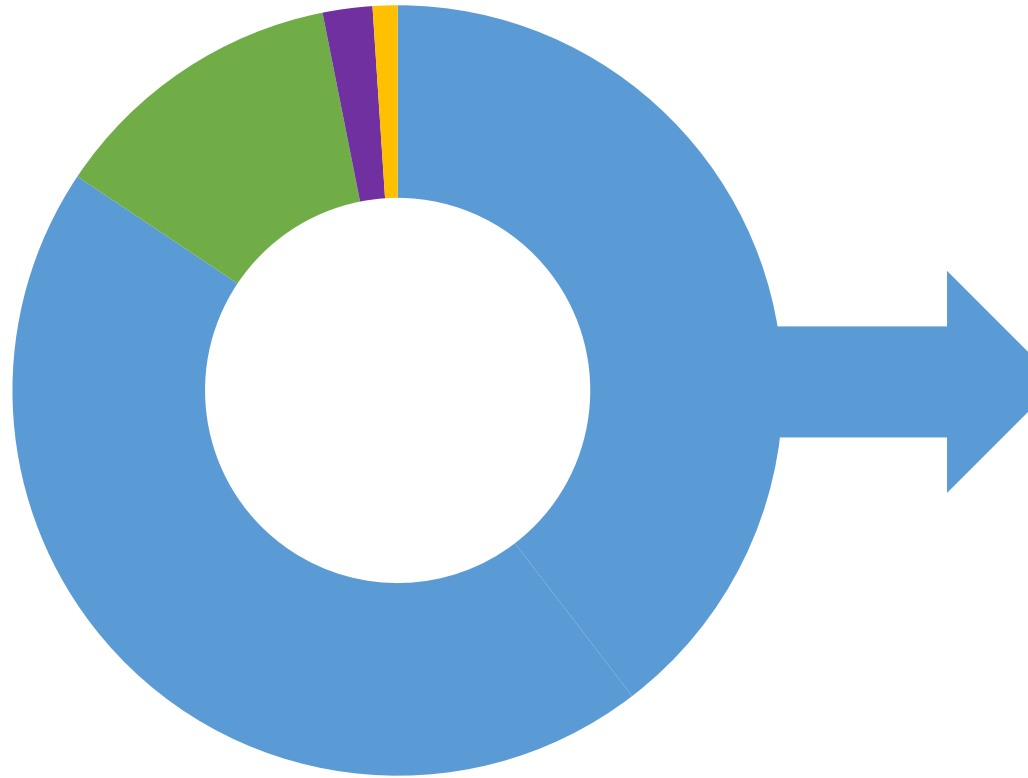


Clear up the conflict

Scientists really don't know what we should eat to be healthy.

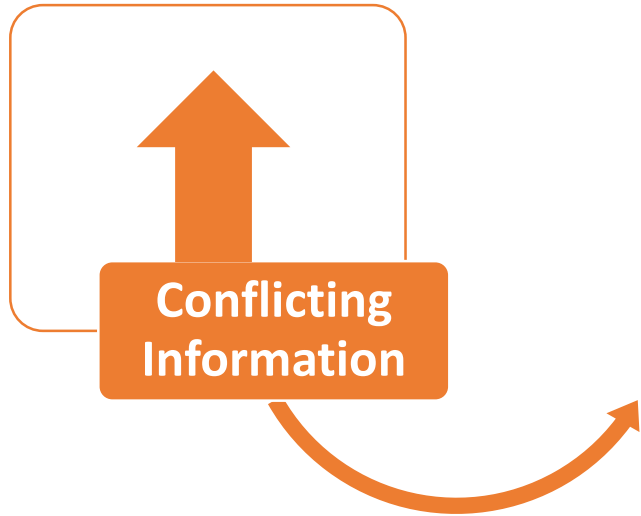


“There is a lot of conflicting information about the foods I should eat or avoid.”



80%
Strongly/
Somewhat Agree

Conflicting Information Effects





Build trust, sell science

Presentation Techniques

- 2-sided Refutational Approach
- Hedging

Adaptive Strategies of the Candidate Probiotic *E. coli* Nissle in the Mammalian Gut

Nathan Crook^{7, 8} • Aura Ferreira⁷ • Andrew J. Gasparini⁹ • ... Stephen Dobrowolski • Daniel Peterson¹³ • Gautam Dantas¹⁴ • [Show all authors](#) • [Show footnotes](#)

Published: March 26, 2019 • DOI: <https://doi.org/10.1016/j.chom.2019.02.005>

Highlights

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

