Communication in context: Mental models, salience, and competing information about obesity

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Disclosure

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Military diet: 3-day diet or dud?

By Sandee LaMotte, CNN

Updated 4:58 PM ET, Thu March 8, 2018

Photos: The real US military diet

Thinking of trying the three-day crash "military diet," supposedly invented to get overweight recruits into shape? It may have worked for them, but for most people, it probably won't help you lose weight.
Communication about obesity: challenges and opportunities

• Consider context: We don’t face a blank slate

• Existing *mental models* of health processes matter
  • See Southwell et al. (2018) in *Emerging Infectious Diseases*

• Existing *information environment* matters
How can science communication support public understanding of obesity?
Popular understanding reflects many authors

- Science prevalence
- Science quality
- Mass media coverage
- Social network diffusion
- Human memory
- Human information processing
Public engagement: At the *intersection of groups*

*Southwell, Reynolds, and Fowlie’s (2013) framework for public understanding of science*
Best practices suggest we must do more than present accurate information.
Salience matters

Example: Southwell et al. (2016)

- [http://wwwnc.cdc.gov/eid/article/22/7/16-0415_article](http://wwwnc.cdc.gov/eid/article/22/7/16-0415_article)
Trust matters

• Example: CDC’s CARE+ (Check and Report Ebola) program to screen in-bound travelers to U.S.
What to do about competing sources of inaccurate information?
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Thinking of trying the three-day crash “military diet,” supposedly invented to get overweight recruits into shape? It’s not what it seems, according to experts. Here’s why.
Do we misunderstand our own vulnerabilities to misinformation?

We need social connection.

We need hope for future.

The lack of either affords opportunity for science communication challenges.
My life-long struggle with the truth

Belle Gibson claimed to be healing her terminal cancer with wholefoods — but now it’s proven to be a cruel web of lies.

Yet is Belle a hoax mastermind or simply...
Our multifaceted vulnerabilities

• We are *biased toward acceptance*.

• There are *reasons why we share misinformation*.

• Our *regulatory approach (in democracies)* emphasizes post hoc detection.

• *Correction is hard*. 
Do we misunderstand misinformation?

Southwell et al. (2019):

- Misinformation is not all equal in consequence.
- New media platforms differ from old in authorship, oversight, and algorithms.
- Misinformation can have indirect effects aside from acute, short-term ones.
- Misinformation correction may itself have unintended consequences.
- System-level challenges warrant system-level, future-oriented remedies.
What do we need to do?

• **Consider interaction** of human psychology, news norms, governance, and various systems.

• **Monitor and seek to understand** – rather than prejudge – public information environments.

• **Build and maintain trust** between science institutions and citizens by acknowledging shared interests.
Thank you!

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