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Principles of Risk Communication

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Prevention / Regulation

- People understand that modern life is not risk-free

- HOWEVER:
  - Few people want any additional risks
  - People expect you to continually work towards zero-risk
  - People want to know how risks can be prevented
  - Some risks are more acceptable than others

Key Mistake: Overestimating what risk communication can do

- Be realistic about what you expect to accomplish
- Risk communication is not a substitute for risk assessment or risk management
  - It is part of both

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Goals for Risk Communication

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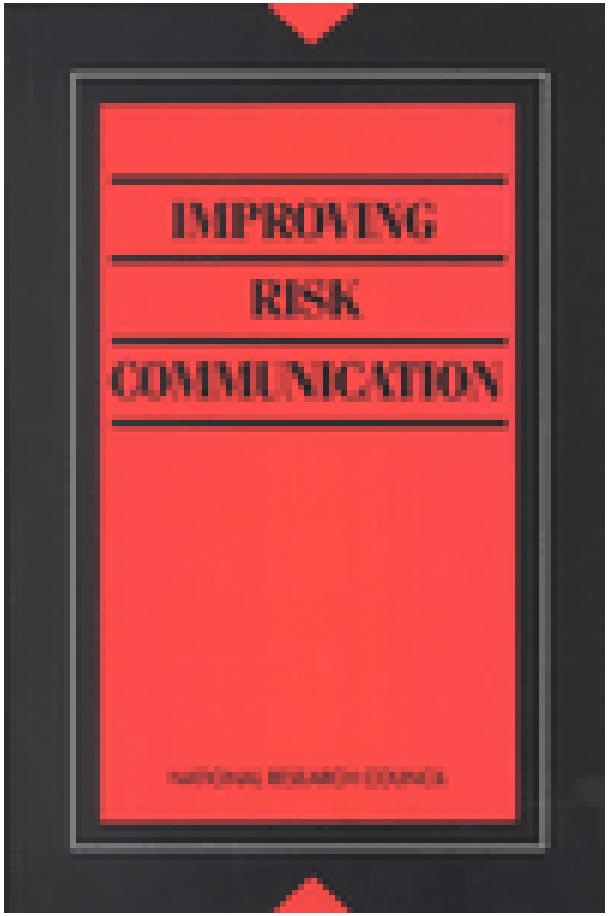
Overall Goal of Risk Communication:

- Help people respond appropriately to risks.
  - What people?
    - With whom should we be communicating?
  - What risk?
    - Which risks are worth considering?
  - What is the appropriate response to the risk?
    - Who decides?
    - On what basis?

U.S. National Research Council

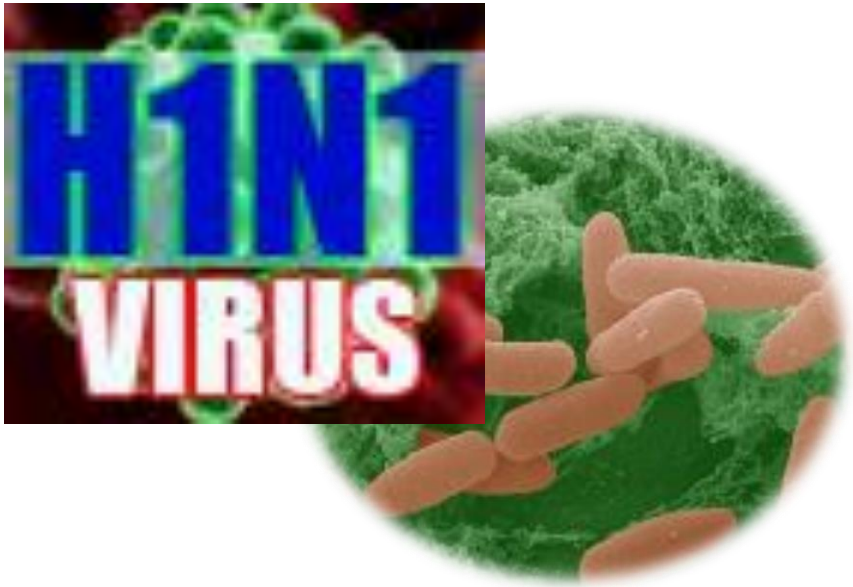
- 3 common objectives for risk communication:
  1. Education
  2. Advocacy/Persuasion
  3. Fostering Partnerships for Decision Making



Improving Risk Communication (1989), National Academy Press

Goal 1: Education

- Provide education or information to:
  - Put new risks into context
  - Help people prepare for or manage risks
    - Examples:
      - Discovery of a new virus or disease
      - Discovery of a new chemical hazard
      - New knowledge about more effective methods to prevent, manage, or remediate a known risk



Education: Putting New Risk into Context

- Assumptions:
  - Communicator has special expertise or information
  - This information is of interest to a particular audience
  - The audience has the ability to use what they learn

- Efforts designed to provide useful and authoritative information so:
  - People can choose what *they themselves* believe is the right action

Goal 2: Advocacy / Persuasion

- Provide information or messages to
  - Change beliefs, attitudes, or behaviors
    - Convince people to adopt a particular view
    - Persuade them to take (or not take) particular actions

Goal 2: Advocacy / Persuasion

- Assumptions:
  - There is a correct set of beliefs or actions
  - The communicator has special expertise or knowledge to determine these correct beliefs or actions
  - Persuading a person to adopt these beliefs or actions is in *their personal* best interest

vs.

- Efforts designed to provide useful and authoritative information so:
  - People choose what the *communicator* believes is the right action.

Goal 3: Partnership for Decisions

- Collect or discuss information that will lead to better collective decisions
  - Examples:
    - Speaking with stakeholders in conducting risk analysis
    - Talking with people to understand concerns about a technology
    - Enhancing public participation in preventing, managing or remediating risks.

Goal 3: Partnership for Decisions

- Assumptions:
  - The communicator may have special expertise or knowledge
  - But others also have important information, expertise, or perspectives
    - These perspectives may differ from technical appraisals
  - The combination should be taken into consideration to make better decisions

- Efforts designed to exchange useful and authoritative information so:
  - The right course of action can be determined.

Key Assumptions:

- For each goal, the assumed roles of the communicator and audience differ
  - Who has information worth sharing?
  - Who should be part of the process of deciding?
- Trouble comes when the answers to these questions are not shared between the communicator and audience

In conclusion

- Be clear about your own goal.
  - What are your assumptions about who has information to share and who should be involved in decision making.
  - If you aren't clear yourself it won't be clear to your audience.

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Risk Perception

William K. Hallman, Ph.D.

Risk Perception

- To effectively communicate about risk, you need to understand how people *perceive* risk.

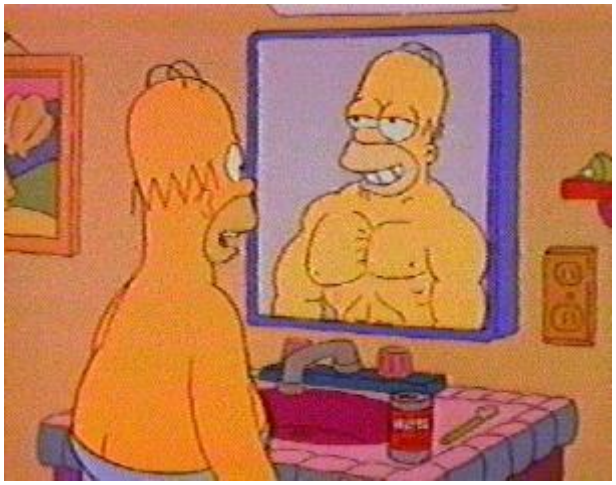
Why is Risk Perception important?

- How people *perceive* risks serves as the basis of their attitudes, intentions, and behaviors.

- Food safety risk communication should not only communicate about risks identified in the risk assessment, but also address the factors that influence risk perception.

Perception

- Perception is reality
  - People act or fail to act based on their perceptions
  - People will incorporate new information that is consistent with their perceptions
  - People tend to reject new information that is inconsistent with their beliefs



Two Components of Risk Perception

- Cognitive components – thoughts
  - Understanding of the likelihood/consequences of the hazard
  - Mental models of how/why the particular hazard poses a threat
  - Understanding of the contexts surrounding the hazard

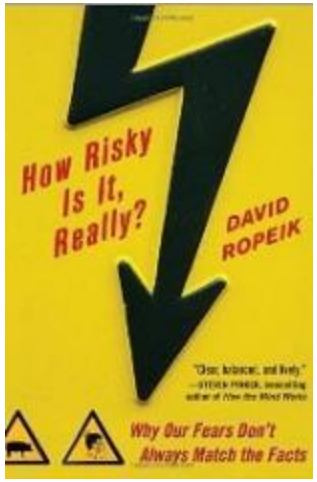
- Affective components – feelings
  - Not just Dread or Outrage
    - Fear
    - Worry
    - Frustration
    - Sadness
    - Anger
    - Disgust
    - Protectiveness
    - Others. . .

Risk Perception

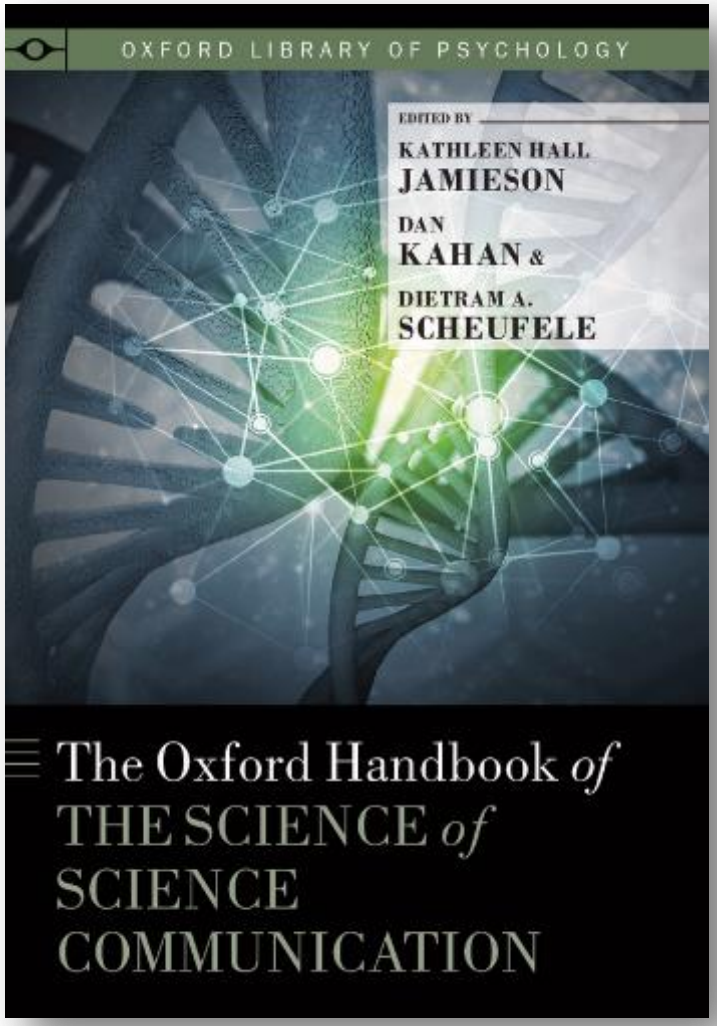
- “Risk perception is a mix of facts and feelings, intellect and instinct, reason and gut reaction. And in many cases, the feelings/instinct/gut have the greater influence.”

  - David Ropeik

Risk communication must address each of these influences



Science of Science Communication



"Safe"	"Risky"
Voluntary	Coerced
Individually controlled	Controlled by others
Exposure can be perceived	Exposure is invisible
Familiar	Exotic
Natural	Industrial
Not dreaded	Dreaded
Not memorable	Memorable
Consequences obscure	Can imagine consequences
Chronic	Catastrophic
Consequences delayed	Consequences immediate
Consequences reversible	Irreversible consequences
No risk to future generations	Risk to future generations
Known to experts	Unknown
Fair	Unfair
No alternatives	Alternatives available
Morally irrelevant	Morally relevant
Anonymous victims	Can empathize with victims
Unable to blame someone	Able to blame someone
Trustworthy sources	Untrustworthy sources
Responsive process	Unresponsive process

Why Does Terrorism Work?

- In addition to the damage/deaths caused by the attack -
- The contextual factors are manipulated to produce huge affective impacts
  - Often the goal of terrorism is to create maximum uncertainty and to undermine confidence in institutions
    - The emotional reactions are not managed and become amplified

Key Mistake: Using the wrong risk comparison

- Be careful when trying to compare risks
- If you must compare risk information, use comparative risks that are similar in terms of their “Contextual Factors”

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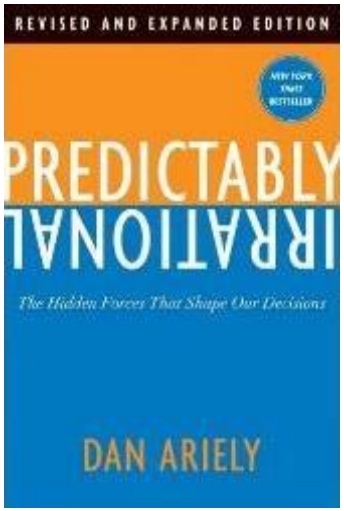
Predictably Irrational

- People's perceptions are often inaccurate
  - but rarely completely irrational
    - Irrationality implies random; illogical; absurd
- People's actions may be inconsistent
  - and they ultimately may not be in their own best interests.

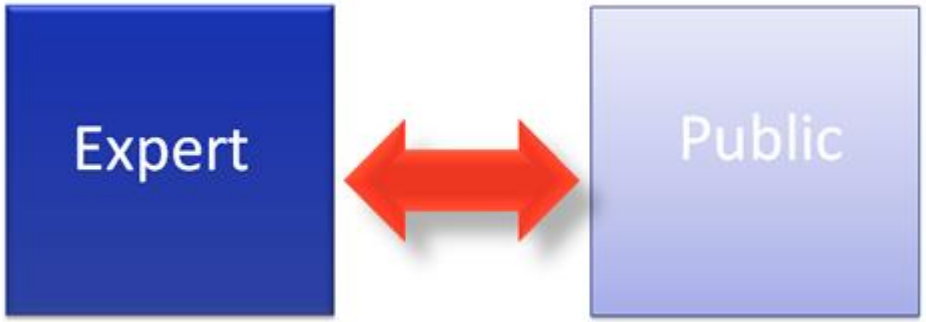
But,

- Risk perception and behavior towards risk are predictable
  - And manageable



Can The Public Reach The Right Decision?

- Yes
  - But it depends on what your definition of “right”
  - Public perceptions are unlikely to match expert perceptions



Can The Public Reach The Right Decision?

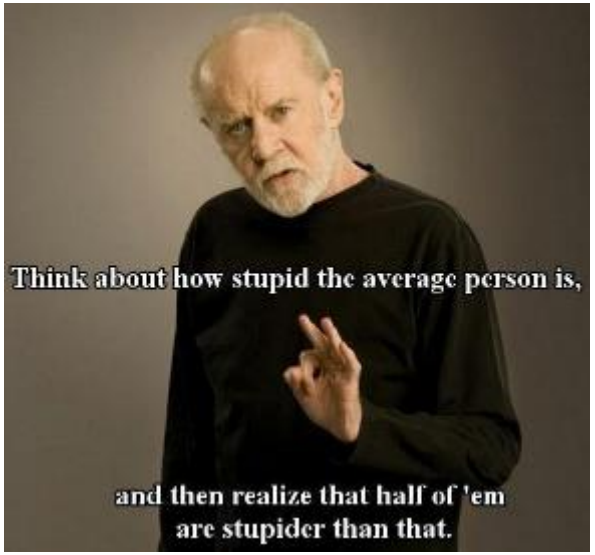
- We tend to believe that:
  - others share our values
  - know many of the same things we do
  - are naturally interested in the same things we are
- We generally overestimate the representativeness of our knowledge and opinions

Can The Public Reach The Right Decision?

- We also believe that given the same set of facts, others would come to the same set of conclusions
  - This belief is strongly held by scientists
    - It's the basis for the scientific method
  - This belief is also socially reinforced
    - We choose friends with similar values and interests who do think much the same way we do
      - In part, this is why we enjoy our associations with them

Can The Public Reach The Right Decision?

- The result is that we tend to think that everyone does (or should) think the same way we do
- When we find out that everyone does not think like we do, the natural tendency is to question the competency or motives of those who do not agree with us
- As a result, it is easy for experts to conclude that the public is stupid, inconsistent, and “irrational”



Danger in Believing the Public is Irrational

- Concluding that since the public is irrational:
  - Efforts to provide information and education are a waste of time and money.
  - They cannot make “good” decisions
    - As such, those who <u>are</u> rational (the experts) should make decisions that are “good for the public.”

Danger in Believing the Public Is Irrational

- Deciding that efforts to provide information and education are a waste of time and money ensures that the public will not have the tools needed to make informed decisions.

Danger in Believing the Public Is Irrational

- Deciding that the experts should make decisions that are “good for the public” nearly ensures that the public will become angry that decisions about the acceptability of a perceived risk are being made for them.

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Mental Models

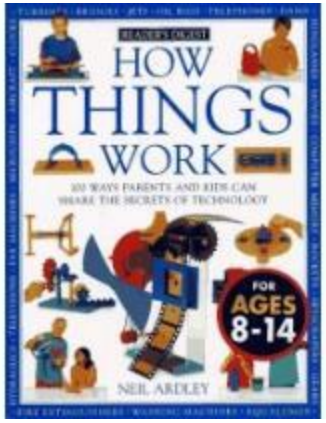
William K. Hallman, Ph.D.

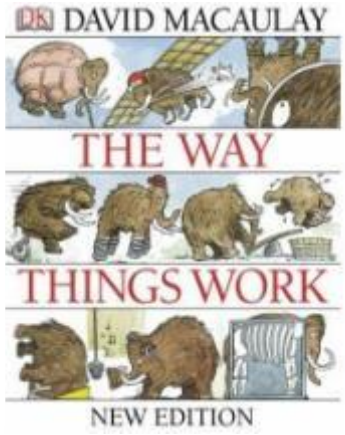
Mental Models

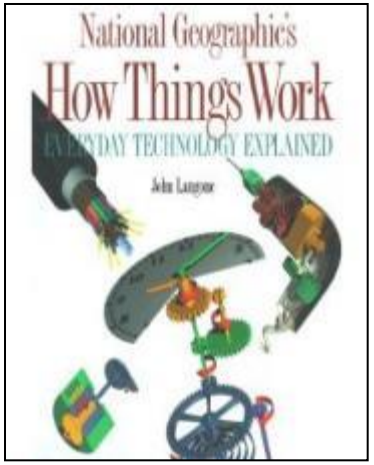
- Important to know what people *know* about an issue.
- Important to know what people *want* to know about an issue.
- More important to know how people *think* about an issue.
  - Systems/technology
  - Consequences/outcomes
  - Motivations/intentions
  - Values
  - Ethics
- Important to understand what they see as “the big picture’ and how they construct that view

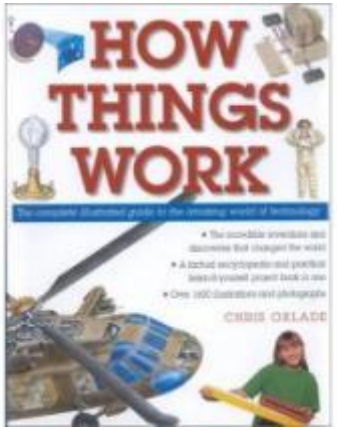
Mental Models

- Mental modeling efforts have often focused exclusively on the science or technology
- ‘How things work’
  - This can be useful in understanding how people are likely to interact with a technology







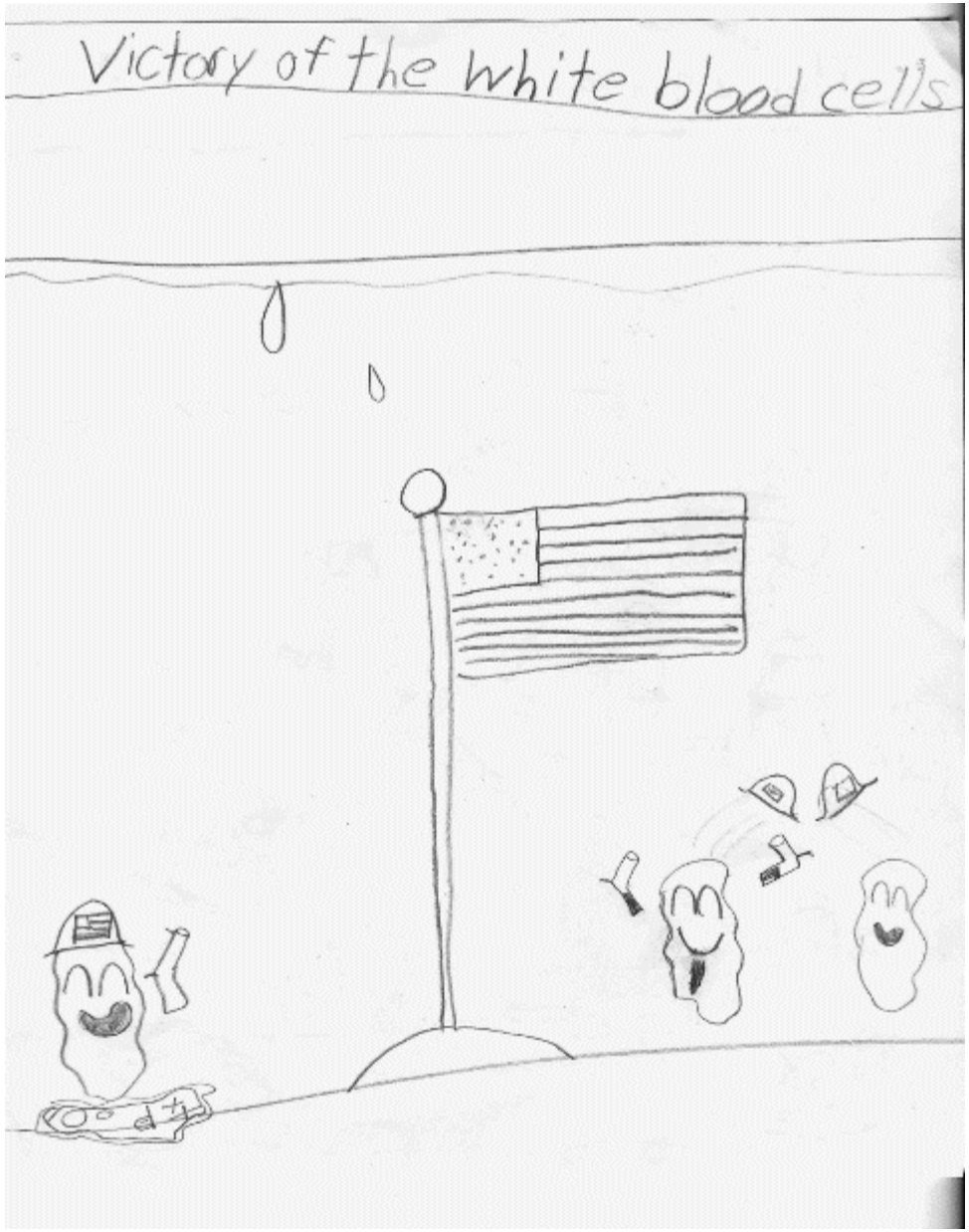


Views of Complex Systems

- Only 20% of Americans rate their understanding of science as poor
  - Most have a poor grasp of basic scientific facts

- In fact, they often exhibit a kind of ‘false fluency’
  - They may have the right vocabulary, but not the right constructs
  - Knowledge is ‘a mile wide and an inch deep’
  - They ‘fill in’ gaps in facts to complete their version of ‘the big picture’
    - They will use whatever information is available to do so
    - This can create problems

How the immune system works



Victory

How Does Vaccination Work?

How Does Vaccination Work?

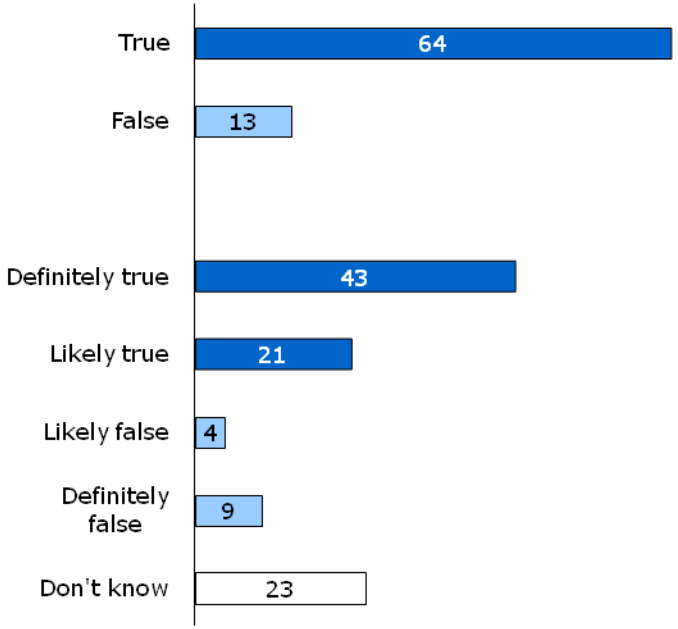
- Consistent with the military metaphor:
  - It adds extra troops to your ‘germ fighters’
  - It’s like the cavalry riding in

How Does Vaccination Work?

- Vaccines help your germ fighters recognize the enemy and respond to them more quickly

Mental Models Matter – Avian Influenza

The Bird Flu Virus is Present in the Uncooked Meat of an Infected Chicken



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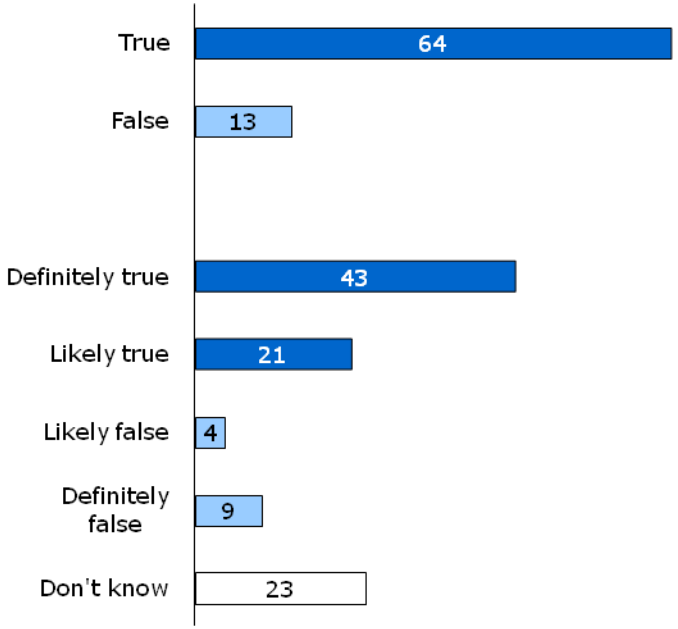
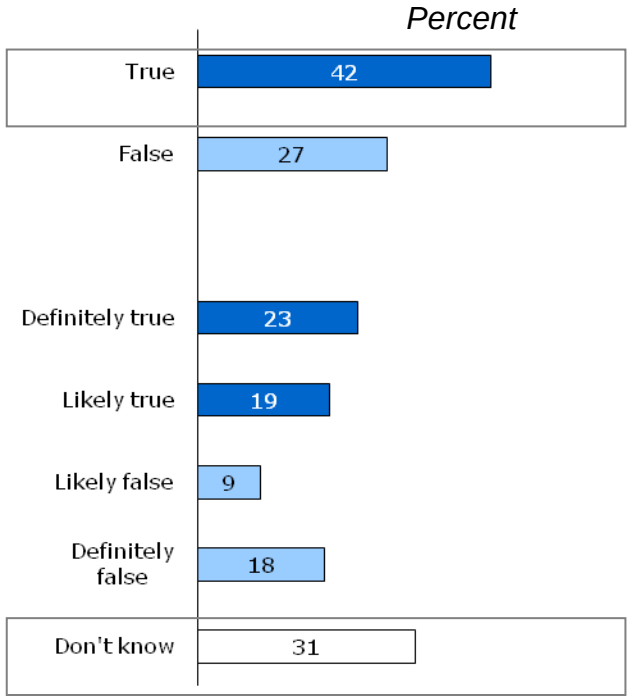


Cooking Chicken to Recommended Temperatures Kills the Bird Flu Virus



Only 4 in 10 think proper cooking kills the virus

Nearly one-third don't know

Views of Nature

- Many believe in a “balance of nature”
  - 90% of U.S. agrees (69% strongly) that “The balance of nature can be easily disrupted by humans.”
  - However,
    - Mental models of what constitutes ‘natural’ differ widely (isn’t manure biodegradeble?)
    - Mental models of how much is required to disrupt nature also varies
    - Many see nature as ‘self repairing’

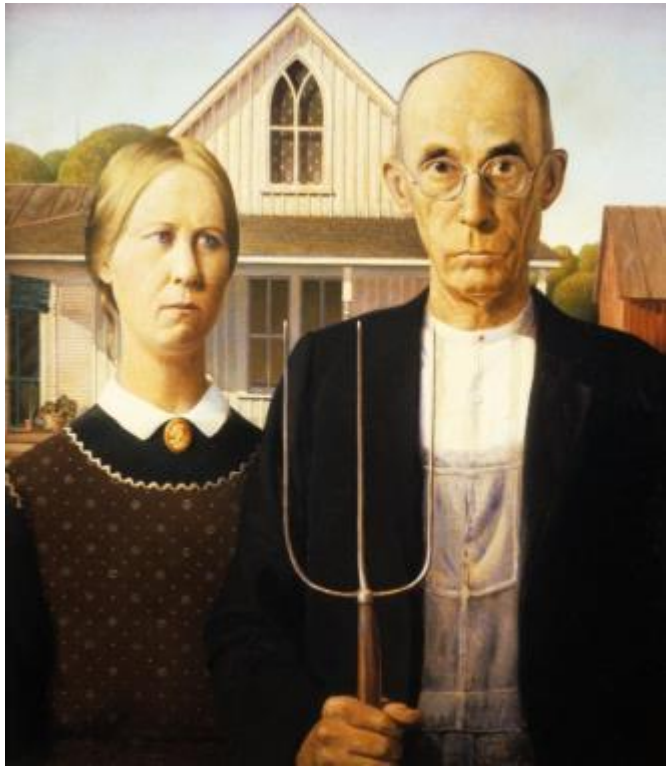
Views of Agriculture

- Cultural divergence in views as to whether Agriculture is part of ‘nature’

People's starting points matter

Many Have Romantic Views of Agriculture

- In the U.S. Many believe that farming is a “noble,” “wholesome” and “romantic” occupation
- Many dream of moving to rural agricultural areas or “the countryside”



http://artappreciationjm.files.wordpress.com/2010/02/american-gothic3.jpg

Others Have “Industrial” Views of Farming

What Do People Assume?

- Many believe that farmers would prefer to farm organically but are forced to use chemical inputs
  - 57% of Americans believe that “Most farmers would prefer to farm organically rather than use chemical pesticides and fertilizers.”

http://artappreciationjm.files.wordpress.com/2010/02/spring-in-the-country.jpg

Hallman, W. K., Adelaja, A. O., & Schilling, B. J., & Lang, J. (2002). *Public perceptions of genetically modified foods: Americans know not what they eat.* (Food Policy Institute Report No. RR-0302-001). New Brunswick, New Jersey: Rutgers University, Food Policy Institute. http://foodpolicy.rutgers.edu/docs/pubs/2002_Public_Perceptions_of_Genetically_Modified_Food.pdf

What Do People Assume?

- There is an overwhelming belief in the “balance of nature”
  - 90% of U.S. agrees (69% strongly) that “The balance of nature can be easily disrupted by humans.”

http://artappreciationjm.files.wordpress.com/2010/02/young-corn.jpg

Hallman, W. K., Adelaja, A. O., & Schilling, B. J., & Lang, J. (2002). *Public perceptions of genetically modified foods: Americans know not what they eat.* (Food Policy Institute Report No. RR-0302-001). New Brunswick, New Jersey: Rutgers University, Food Policy Institute. http://foodpolicy.rutgers.edu/docs/pubs/2002_Public_Perceptions_of_Genetically_Modified_Food.pdf

Views of Private Property

- Americans have a special relationship with the land and natural resources
  - The ideal of private property appeared and grew as America grew
  - Americans believe in the institution of private property rights perhaps more than any other people.
- What happens on farms happens on private property

Intuitive Toxicology: Dose – Response

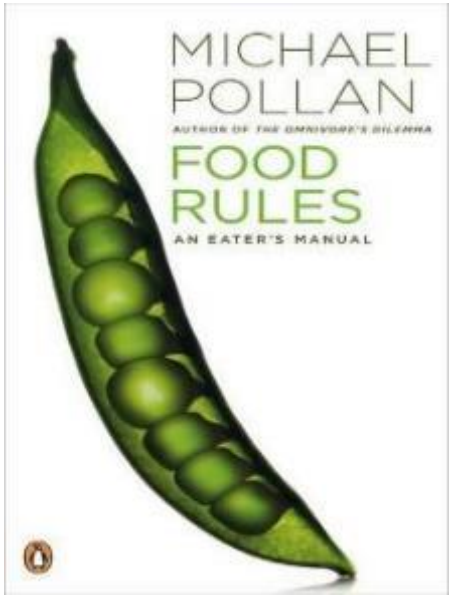
- Few understand the dose – response relationship
  - 85% agree: “If you are exposed to a toxic chemical substance, then you are likely to suffer adverse health effects”
  - 36% agree: “For pesticides, it’s not how much of the chemical you are exposed to that should worry you, but whether or not you are exposed to it at all”
  - 34% agree: “If you are exposed to a carcinogen, then you are likely to get cancer”

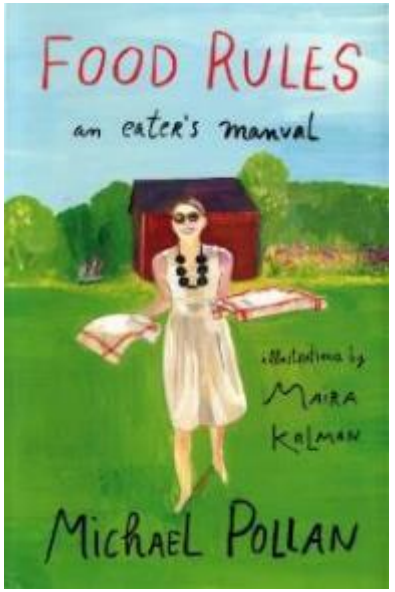
- Kraus, Malmfors, & Slovic 1992. Intuitive toxicology: expert and lay judgments of chemical risks. *Risk analysis* 12(2) 215-232

Many People Find Making the "Right" Food Choices is Difficult

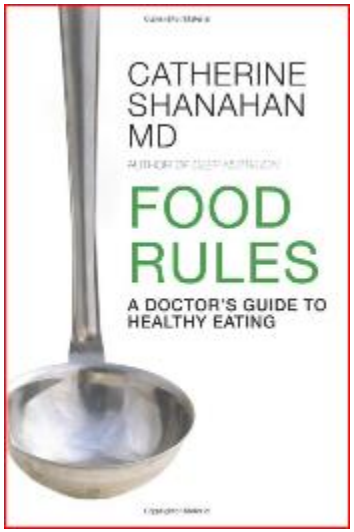
People are Open to Simple Heuristics

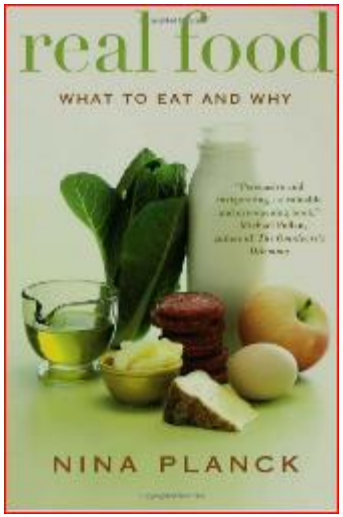
- “Eat Organic”
- “Whole foods are best”
- “Eat food. Not too much. Mostly plants.”
  - Michael Pollan

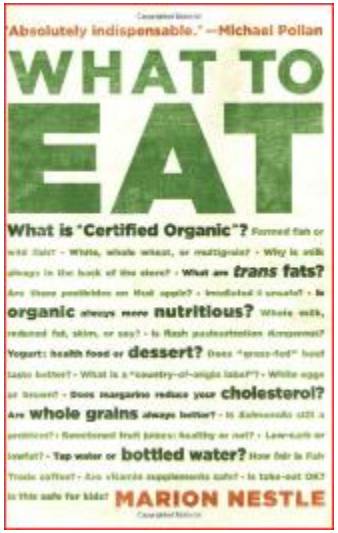


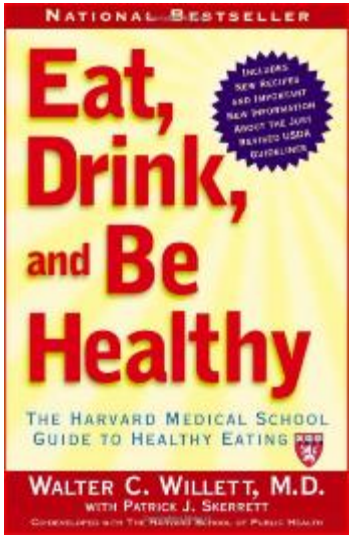


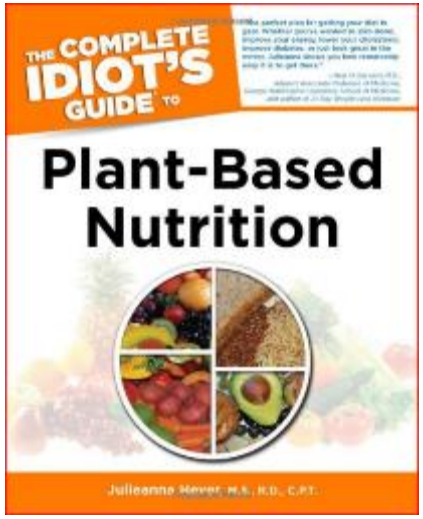
No Shortage of Food Rules

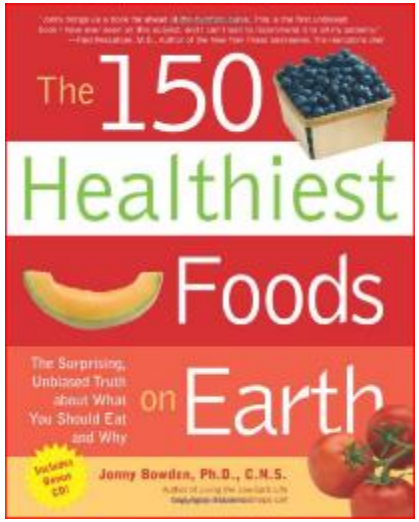


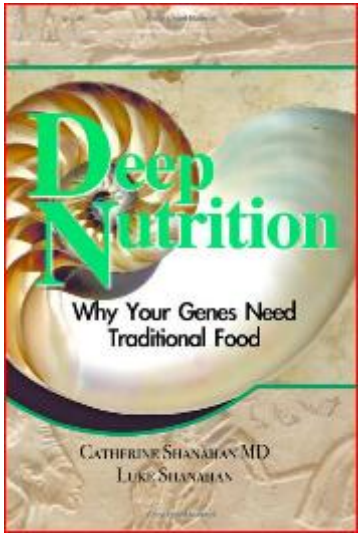




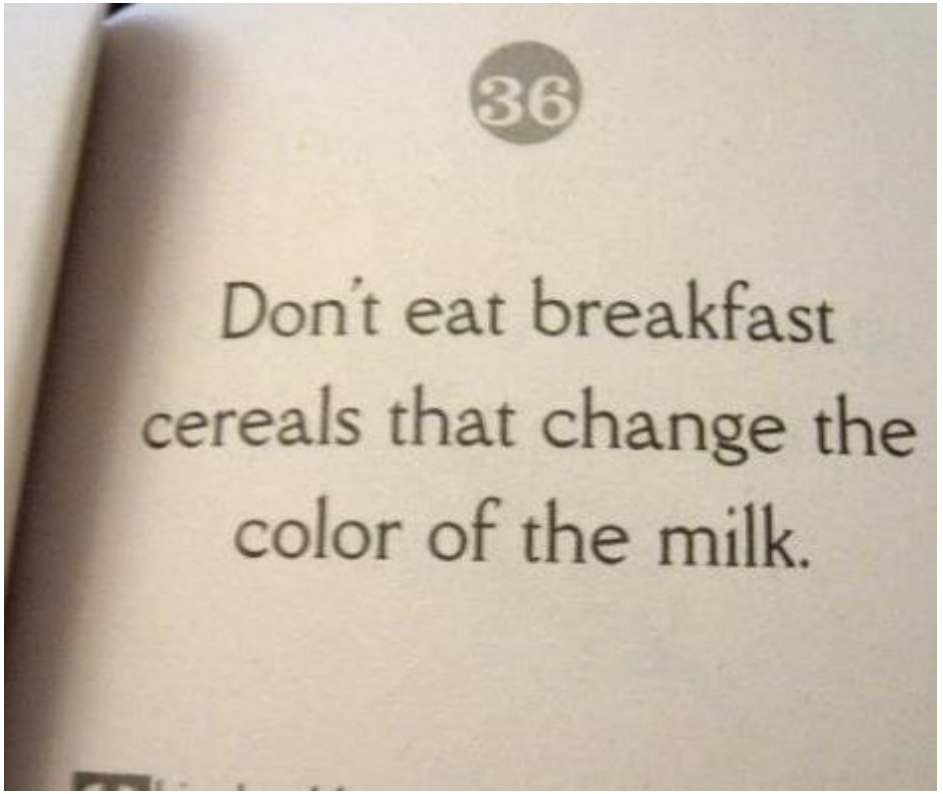








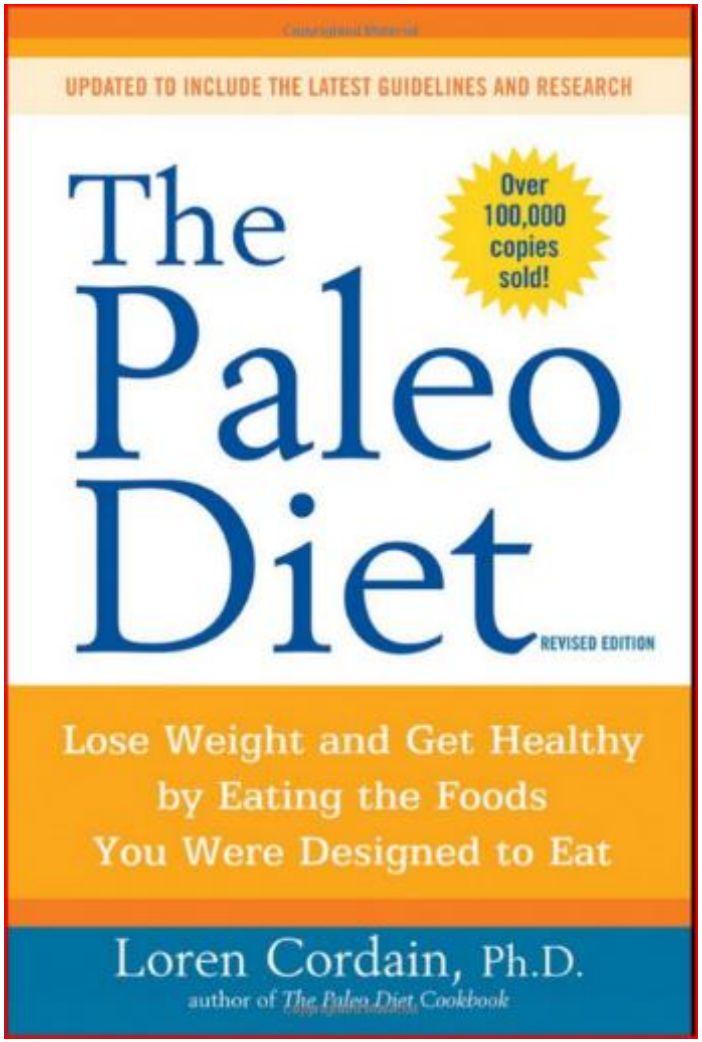
“Rules” Depend on *Intuitive* Plausibility

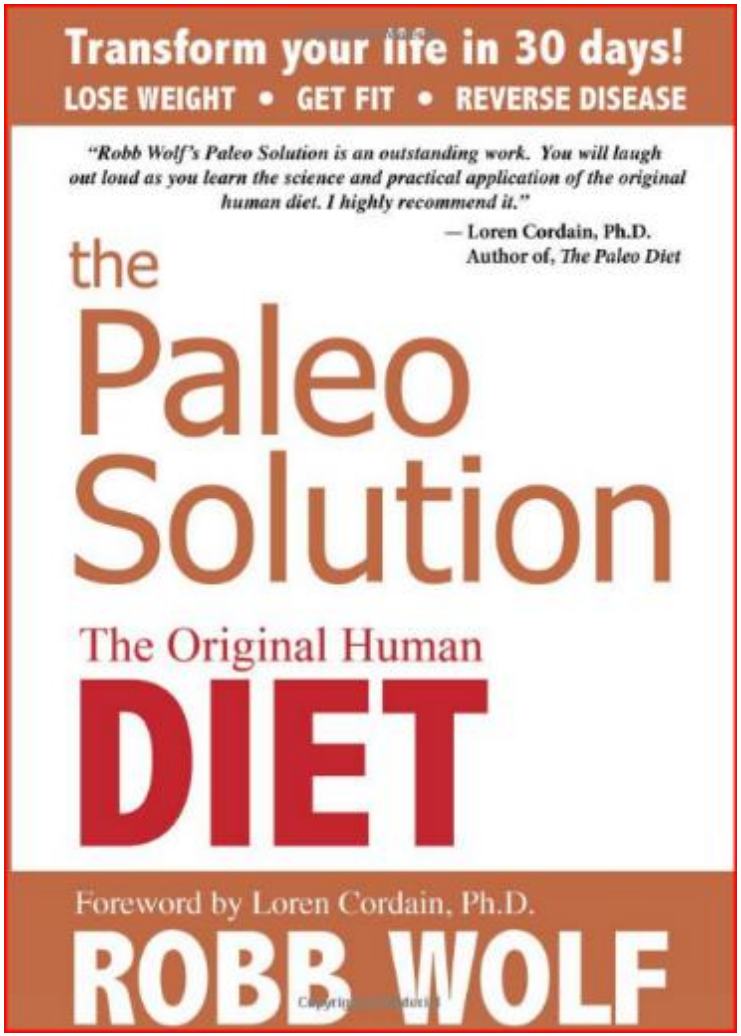


Pollan, M. (2009). *Food rules: An eater's manual*. Penguin.

Naturalness Bias is important

No grains, no gluten, no legumes, no dairy





Intuitive Microbiology

- Emotional reactions to microbial contamination are likely to be a combination of both fear and disgust
  - The “ick” or “yuck” factor

Intuitive Microbiology

- Cultural assumptions about food, purity, and cleanliness are important
  - Cultural differences in what should be refrigerated

http://www.npr.org/sections/thesalt/2014/09/11/336330502/why-the-u-s-chills-its-eggs-and-most-of-the-world-doesnt

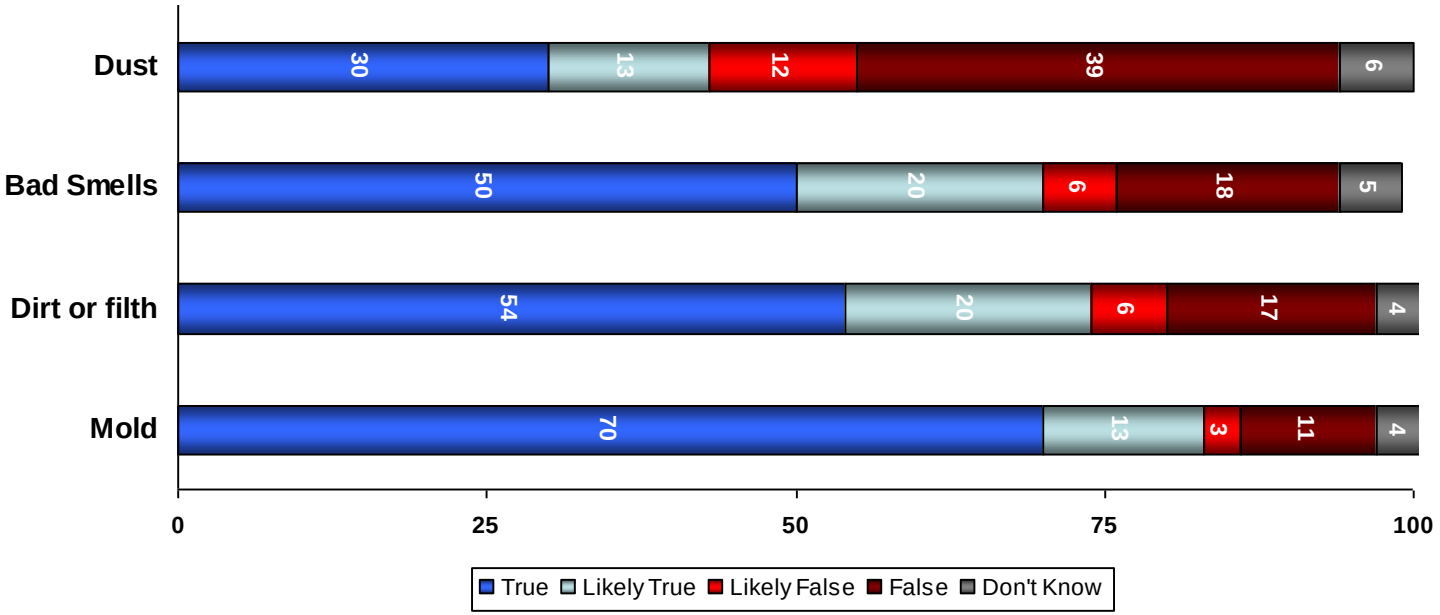
Intuitive Microbiology

- Much of what people know about microbiology is rooted in popular culture
  - Studies suggest that much of what people know about bacteria and viruses come from advertisements for consumer products:
    - toothpaste
    - mouthwash
    - household cleaners

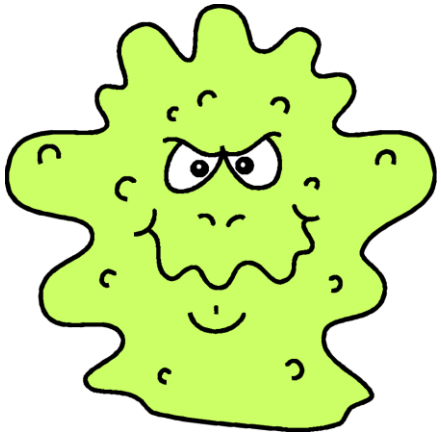
Indicators of Germs

A clean-looking home is a germ-free home

- Most (83%) believe that mold is a good indicator that germs are present
- Nearly three-quarters believe that dirt, filth, and bad smells indicate the presence of germs
- 43% believe that dust is a good indicator of germs.

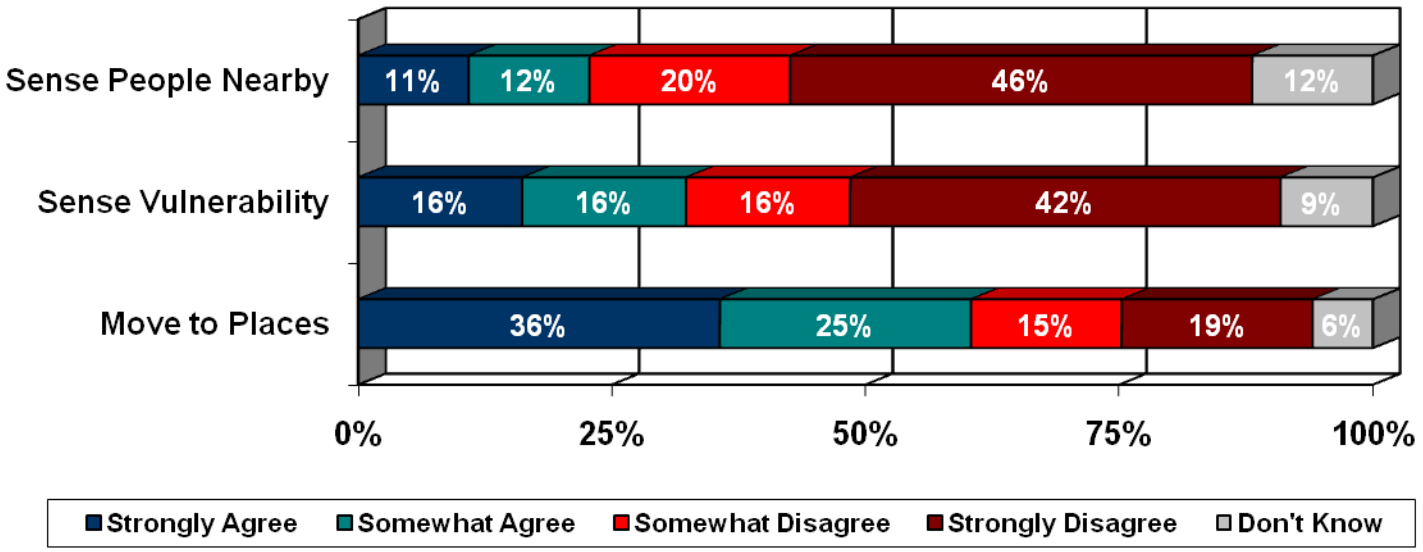


Anthropomorphizing Germs



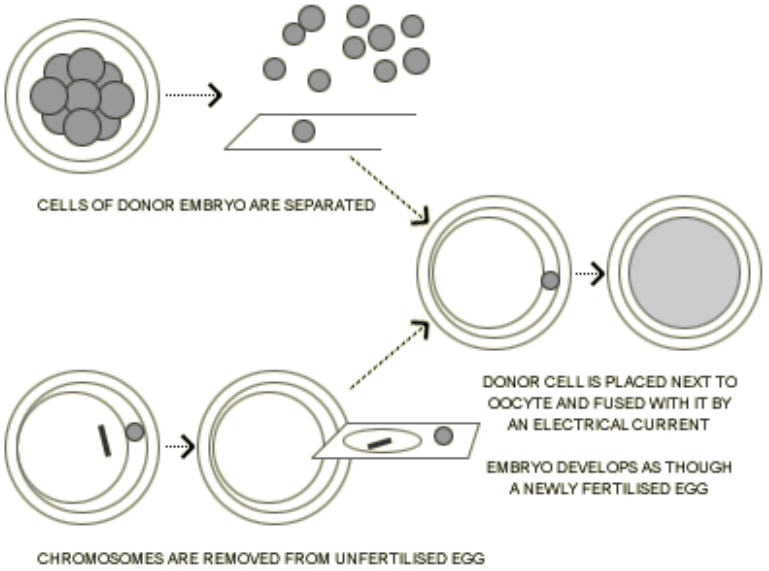
Anthropomorphizing Germs

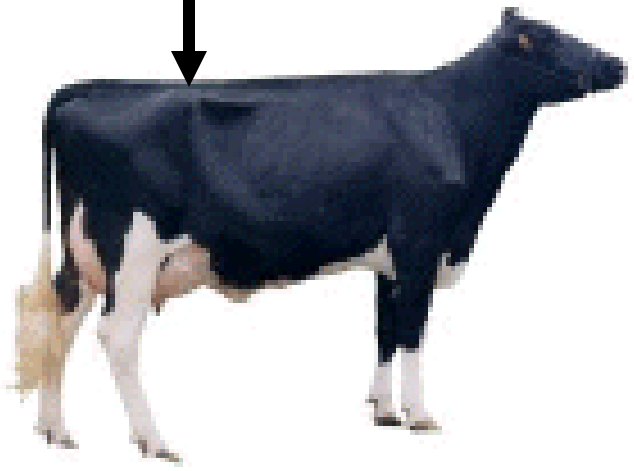
- Nearly one-quarter of Americans agree that germs can sense when people are nearby.
- About one-third agree that germs can sense which people are most vulnerable.
- More than half (60%) agree that germs move to places that make it easier for them to infect people.



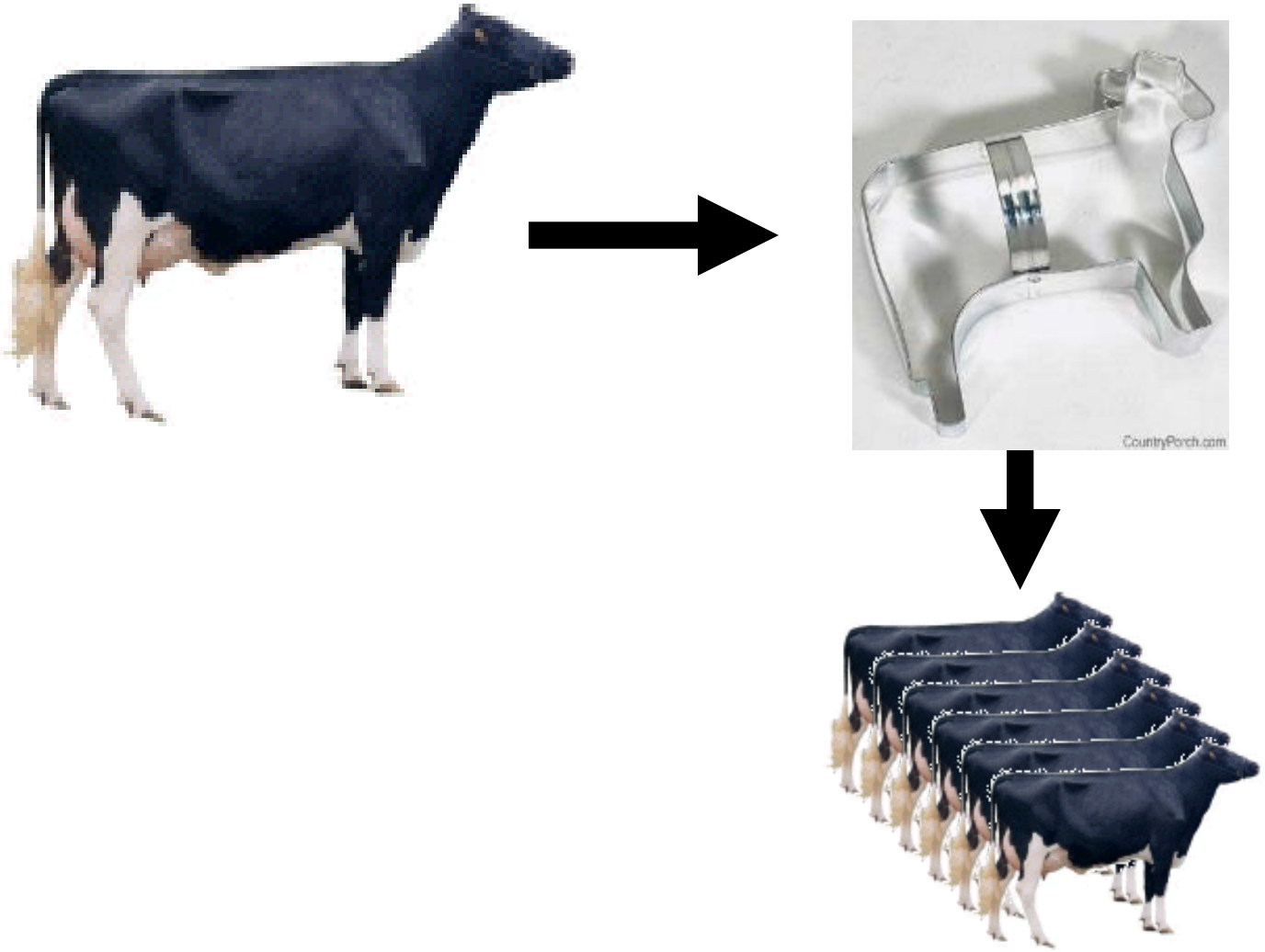
Hallman, W. K. (2008). Communicating about microbial risks in foods. In D. W. Schaffner (Ed.). *Microbial Risk Analysis of Foods*. (pp. 205-262). Washington D. C.: American Society for Microbiology (ASM) Press. ISBN: 978-1-55581-461-8

How Does Animal Cloning Work?





How Does Animal Cloning Work?



How Does Animal Cloning Work?

- Most know that the *outcome* is supposed to be a copy of another animal
- Few know how it works

- False fluency
  - "insert the cell of an animal into a fetus"
- Confusion with twinning
  - "you split the cell"
- Few connections to gestation or birth
- Some vague notion that adult animals spring directly from other adult animals

What do People Want to Know About Cloning?

- Who is doing it?
- Where?
- Goals/objectives?
- Status of research?
- Risks and benefits
  - To consumers
  - To cloned animals
- Who is monitoring / regulating?
- Is it safe?
- Are the animals normal – what kind of problems?
- How does it work?
- What happened to Dolly?
- Are we (will we) eat food from cloned animals? Is it safe?

- Pretty standard questions a journalist might ask

- Except,
  - An interest in ethical, moral, philosophical arguments for and against cloning
  - Are cloned animals really identical to non-cloned animals

Mental Models

- People lack many of the basic scientific details
- They are unlikely to pick them up through formal educational efforts
- Yet, people do develop mental models that provide a basis for their personal understanding and perceptions of:
  - how things work
  - whether they are safe
  - under what circumstances they may be useful
- These perceptions are largely based on the information in the world around them

Key Mistake: Focusing only on what people "need to know"

- Be sure to do your homework
- Begin your communications with answers to what people *want* to know
- Once people have their questions answered, they are more likely to listen to additional information

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How People Take in Information

William K. Hallman, Ph.D.

Three Filters of Reality + One

- Literacy
  - The ability to understand words and stories
    - Written/spoken
- Numeracy
  - The ability to understand the numbers
- Ecolacy
  - Skill in understanding complex relationships
- Graphicacy
  - The ability to understand pictures

Hardin, G. (1985). "The Expert as Enemy and Three Filters of Reality," in Hardin, Filters Against Folly: How to Survive Despite Economists, Ecologists, and the Merely Eloquent. (pp. 7-25). New York: Viking Penguin.

Literacy

- It's the way 'normal' people learn and communicate
- Through:
  - Stories
  - Anecdotes
  - Examples
  - Metaphors
  - Analogies

https://www.youtube.com/watch?v=GEXEHWPsREc&list=PLxrS3n2SvsMqjYu0YYODESYWAwIswd2gg

- Often, these are culturally specific
  - And generationally specific

http://www.youtube.com/watch?v=QCO6smQrjJ8&feature=relmfu

http://www.youtube.com/watch?v=le2v90CQyhs

https://www.youtube.com/watch?v=lyncpoNJ7LM

https://www.youtube.com/watch?v=rmLJJ3oLrHU

http://www.youtube.com/watch?v=oLRBidDuvmg

Graphicacy

- Visual Communication
- Through:
  - sketches
  - photographs
  - diagrams
  - maps
  - plans
  - charts
  - graphs
  - symbols
  - other non-textual formats

- Interpretation is often culturally constrained

Graphicacy

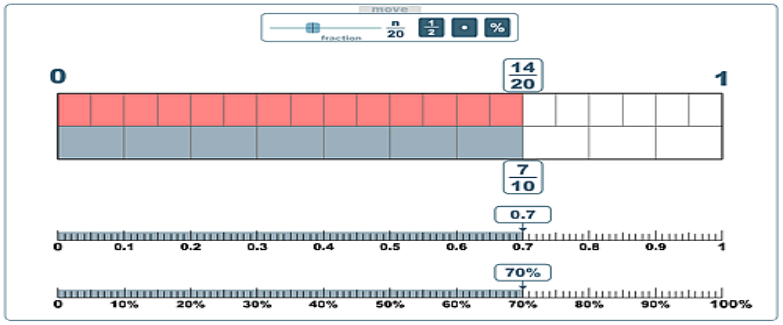
- Interpretation is often constrained by context

Graphicacy

- Interpretation is often constrained by context

Numeracy

- Essential to science, engineering, technology
- But, much of the public struggles with mathematical concepts
  - Many have a difficult time grasping:
    - Very small and very large numbers
    - Fractions
    - Proportions
    - Percentages
    - Probabilities



$$3\frac{2}{5} + 1\frac{4}{7} = \frac{17}{5} + \frac{11}{7}$$

change to improper fractions

$$= \frac{17\times7}{5\times7} + \frac{11\times5}{7\times5} = \frac{119}{35} + \frac{55}{35}$$

change to the LCD of 35

$$= \frac{119+55}{35} = \frac{174}{35}$$

Implications

- Scientists often communicate using numbers
- Non-Scientists (and most journalists) communicate using words, stories, and sometimes pictures
  - This often presents a communications barrier
    - Even to experts outside of a given field

Ecolacy

- The ability to see ‘the big picture’
- The capacity to envision both intended and unintended consequences

Ecolacy

- Literacy + Numeracy + Graphicacy ≠ Ecolacy
  - We all know people who are brilliant **but ...**
    - Are so focused on the details they can't see the big picture
    - Lack common sense

Implications

- Seeing the ‘big picture’ isn’t simply a matter of observing all of the details
  - Often, to grasp the details you need the context of the ‘big picture’
- Educating people about the scientific details doesn’t necessarily lead to greater comprehension of the big picture or the ability to make informed decisions

Gist vs. Verbatim Representations

Fuzzy-Trace Theory

- Verbatim
  - Precise and quantitative
  - Captures the exact *surface form* of information
  - It is a *literal* representation of the information

- Gist
  - Vague (fuzzy) and qualitative
  - Captures the bottom-line *meaning* of information
  - Subjective interpretation of information
    - Based on emotion, education, experience, worldview, and level of development

Reasoning Using Gist vs. Verbatim

- Fuzzy-Trace Theory suggests that:
  - People can process both Gist and Verbatim information
  - But, they prefer to *reason* using Gist information
  - A combination of Gist and values influences decision-making

- Example -
  - Verbatim: “According to a study done in the late 1990s by the Centers for Disease Control and Prevention (CDC), smoking shortened male smokers’ lives by 13.2 years and female smokers’ lives by 14.5 years. Men and women who smoke are much more likely to die between the ages of 35 and 69 than those who have never smoked.”
  - Gist: “Cigarette smokers die much younger than non-smokers.”
  - Value: Dying prematurely is bad
  - Decision: Stop smoking

Cues to Gist

- Language matters
  - “Climate change” vs. “Global warming”
  - AquaAdvantage Salmon vs. “FrankenFish”

What should we call the technology?

Biotechnology

Bioengineering

Genetic Engineering

Genetic Modification

Precision Breeding

Speed Breeding

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Science and Risk Communication in an Era of Social Media

Meghnaa Tallapragada, Ph.D.
Annenberg Public Policy Center of the University of Pennsylvania
Clemson University
30 June 2017

Social Media Landscape

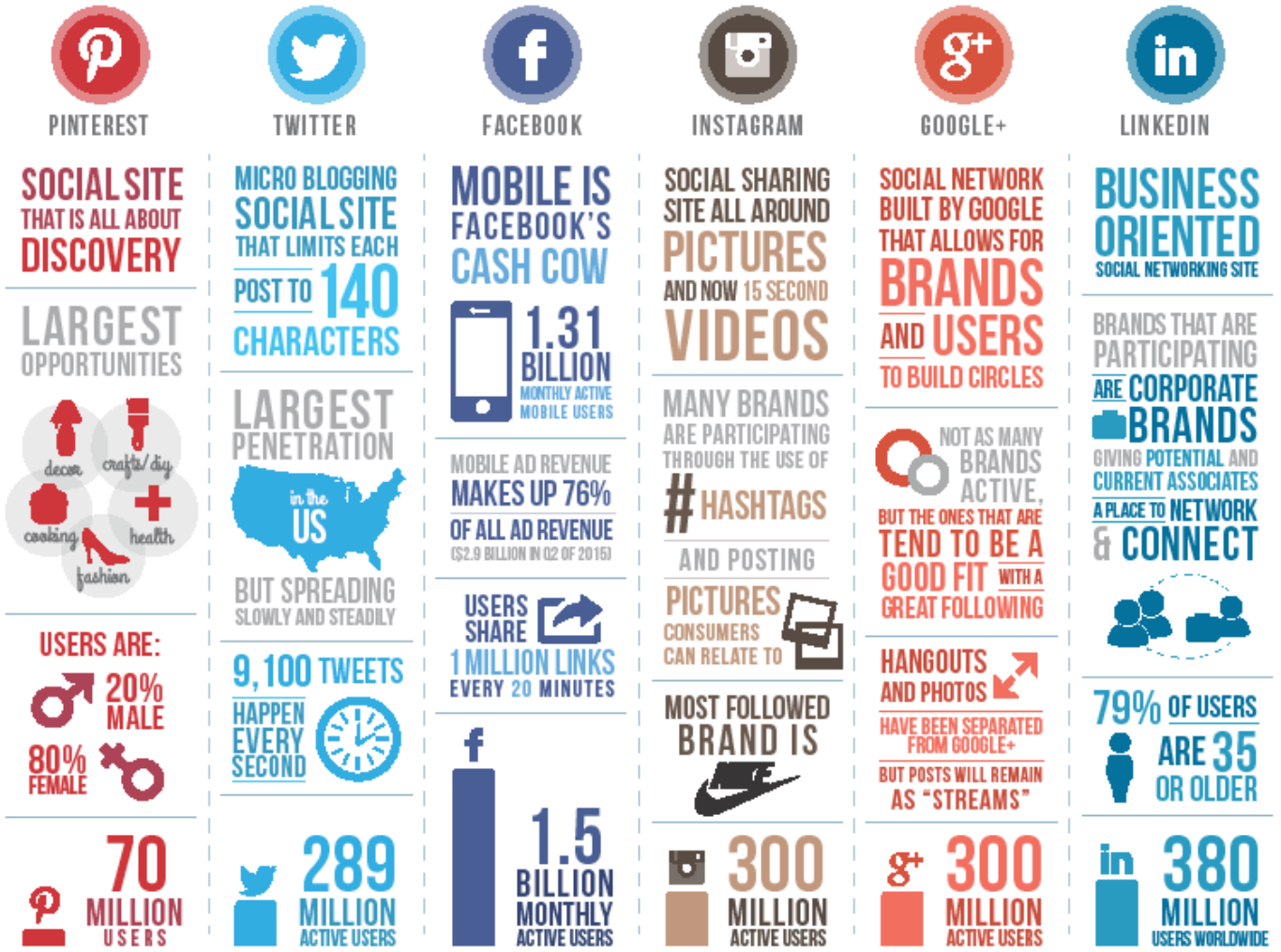
SOCIAL MEDIA EXPLAINED...

BY Donuts

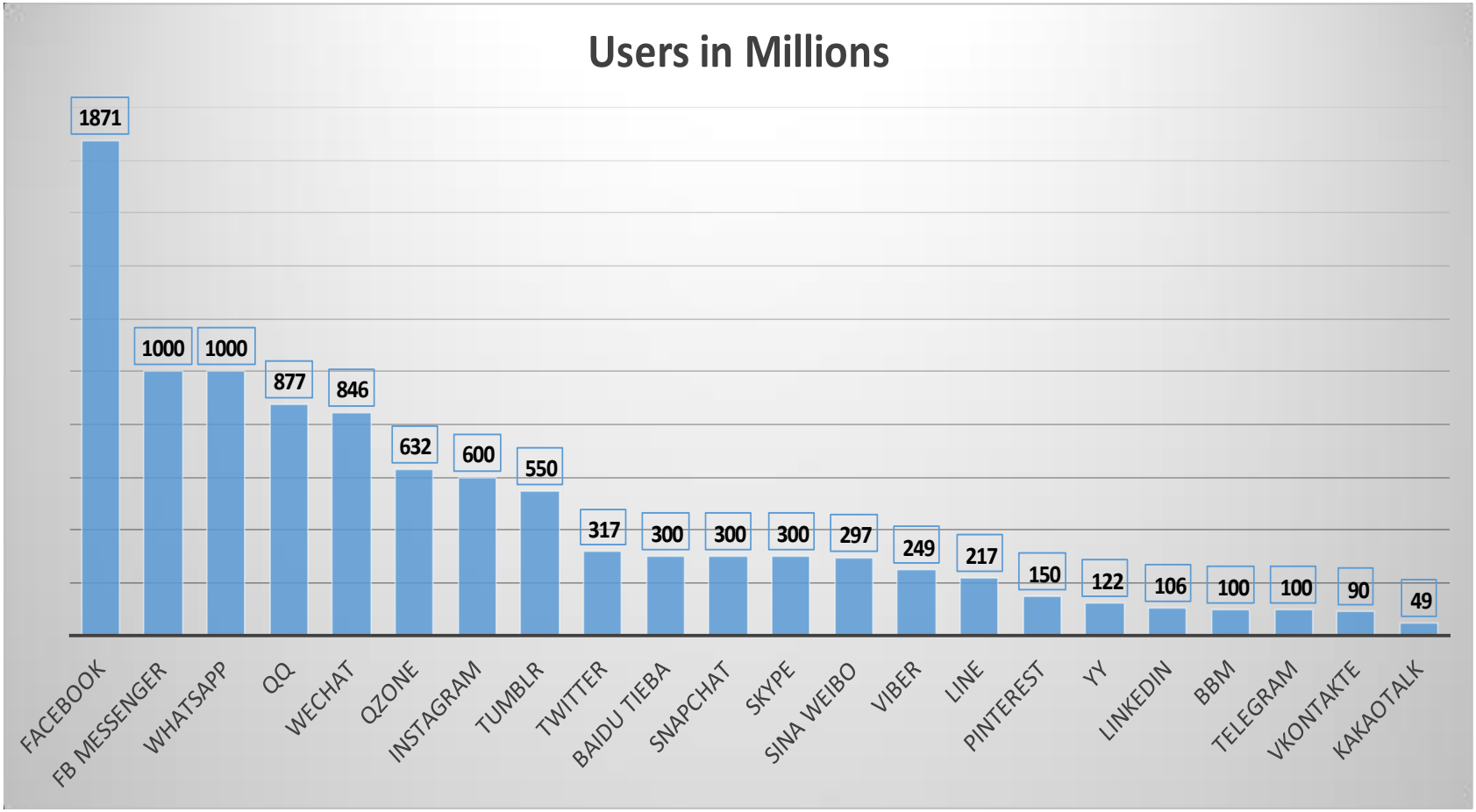
- TWITTER: I'M EATING DONUTS
- FACEBOOK: I LIKE DONUTS
- FOURSQUARE: THIS IS WHERE I EAT DONUTS
- YOUTUBE: WATCH ME EAT DONUTS
- LINKEDIN: I AM VERY SKILLED AT EATING DONUTS
- GOOGLE+: I AM A GOOGLE EMPLOYEE WHO EATS DONUTS
- MYSPACE: WHERE'D ALL THE OTHER DONUTS GO?
- INSTAGRAM: HERE IS A VINTAGE PHOTO OF MY DONUT
- QUORA: WHY AM I EATING DONUTS?
- TOUT: WATCH ME EAT DONUTS REALLY FAST
- PHOTOVINE: SEE GOOGLE'S FAILED DONUT PHOTO
- PINTEREST: HERE IS MY DONUT RECIPE
- TUMBLR: HERE IS MY BRIEF STORY ABOUT DONUTS
- REDDIT: READ ABOUT HOW I EAT DONUTS
- YELP: READ A REVIEW OF MY DONUT
- FLIKR: ADD MY PHOTO OF DONUTS
- PRWEB: PRESS RELEASE: I ATE A DONUT
- STUMBLEUPON: EVER TRIED A FISH DONUT?
- CRAIGSLIST: ANYONE WANT TO BUY A DONUT?

The Digital Dope

http://thedigitaldope.in/wp-content/uploads/2015/02/SMD.jpg


PINTEREST
SOCIAL SITE THAT IS ALL ABOUT DISCOVERY
LARGEST OPPORTUNITIES
decor
crafts/ diy
cooking
health
fashion
USERS ARE:
20% MALE
80% FEMALE
70 MILLION USERS
TWITTER
MICRO BLOGGING SOCIAL SITE THAT LIMITS EACH POST TO 140 CHARACTERS
LARGEST PENETRATION
in the US
BUT SPREADING SLOWLY AND STEADILY
9,100 TWEETS HAPPEN EVERY SECOND
289 MILLION ACTIVE USERS
FACEBOOK
MOBILE IS FACEBOOK'S CASH COW
1.31 BILLION MONTHLY ACTIVE MOBILE USERS
MOBILE AD REVENUE MAKES UP 76% OF ALL AD REVENUE
($2.9 BILLION IN Q2 OF 2015)
USERS SHARE 1 MILLION LINKS EVERY 20 MINUTES
1.5 BILLION MONTHLY ACTIVE USERS
INSTAGRAM
SOCIAL SHARING SITE ALL AROUND PICTURES AND NOW 15 SECOND VIDEOS
MANY BRANDS ARE PARTICIPATING THROUGH THE USE OF #HASHTAGS
AND POSTING PICTURES CONSUMERS CAN RELATE TO
MOST FOLLOWED BRAND IS
300 MILLION ACTIVE USERS
GOOGLE+
SOCIAL NETWORK BUILT BY GOOGLE THAT ALLOWS FOR BRANDS AND USERS TO BUILD CIRCLES
NOT AS MANY BRANDS ACTIVE, BUT THE ONES THAT ARE TEND TO BE A GOOD FIT WITH A GREAT FOLLOWING
HANGOUTS AND PHOTOS HAVE BEEN SEPARATED FROM GOOGLE+
BUT POSTS WILL REMAIN AS "STREAMS"
300 MILLION ACTIVE USERS
LINKEDIN
BUSINESS ORIENTED SOCIAL NETWORKING SITE
BRANDS THAT ARE PARTICIPATING ARE CORPORATE BRANDS GIVING POTENTIAL AND CURRENT ASSOCIATES A PLACE TO NETWORK & CONNECT
79% OF USERS ARE 35 OR OLDER
380 MILLION USERS WORLDWIDE
Statistics as of 7.8.2015 Designed by: Leverage - leveragenewagemedia.com

Number of Users of Social Media



Pop Quiz

Weibo
297 million users

Qzone
632 million users

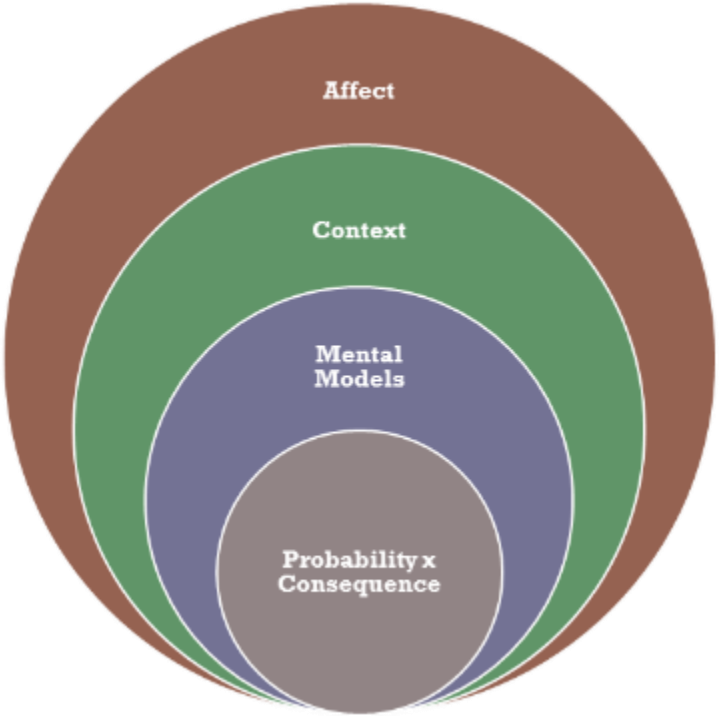
Provide accurate information (directly) – Tackle misinformation

Speed & Reach

Monitor public reactions & responses: Assists in understanding audiences

Identify: Supporters, Critics, Observers

Manage and contribute to (risk) perceptions



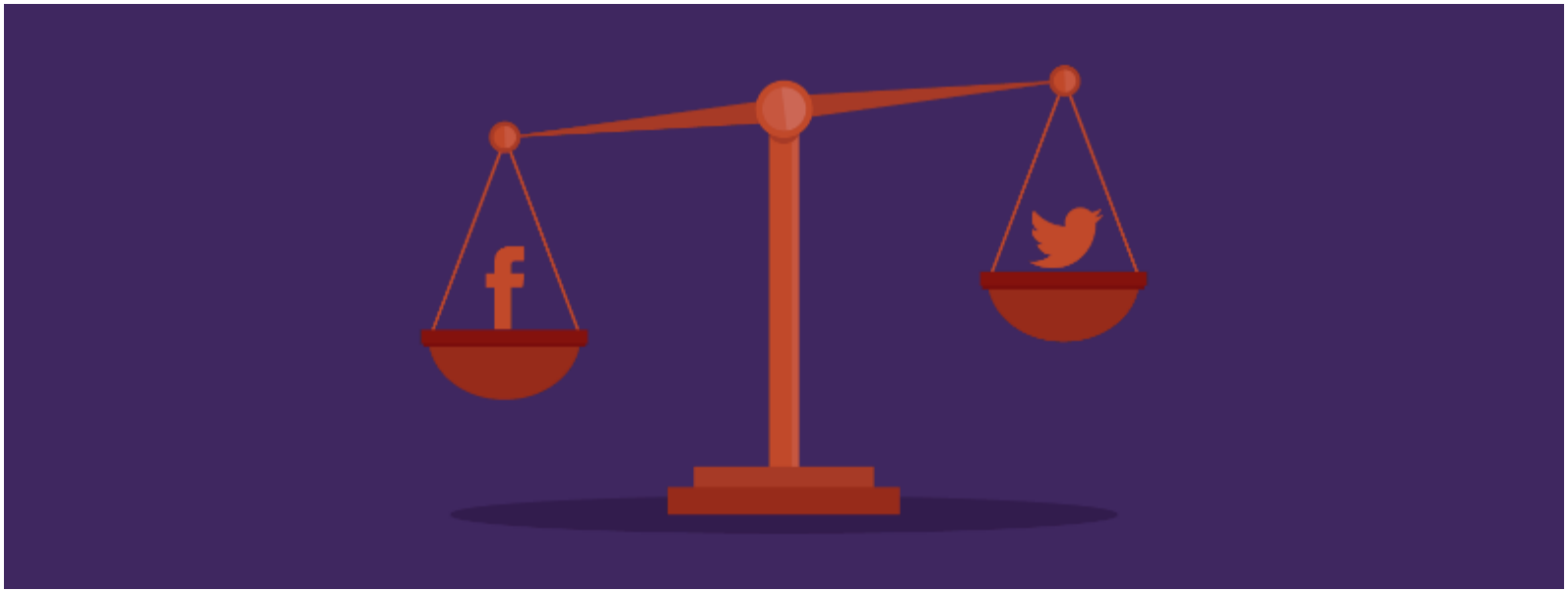
Build trust & credibility: Reputation

Some considerations

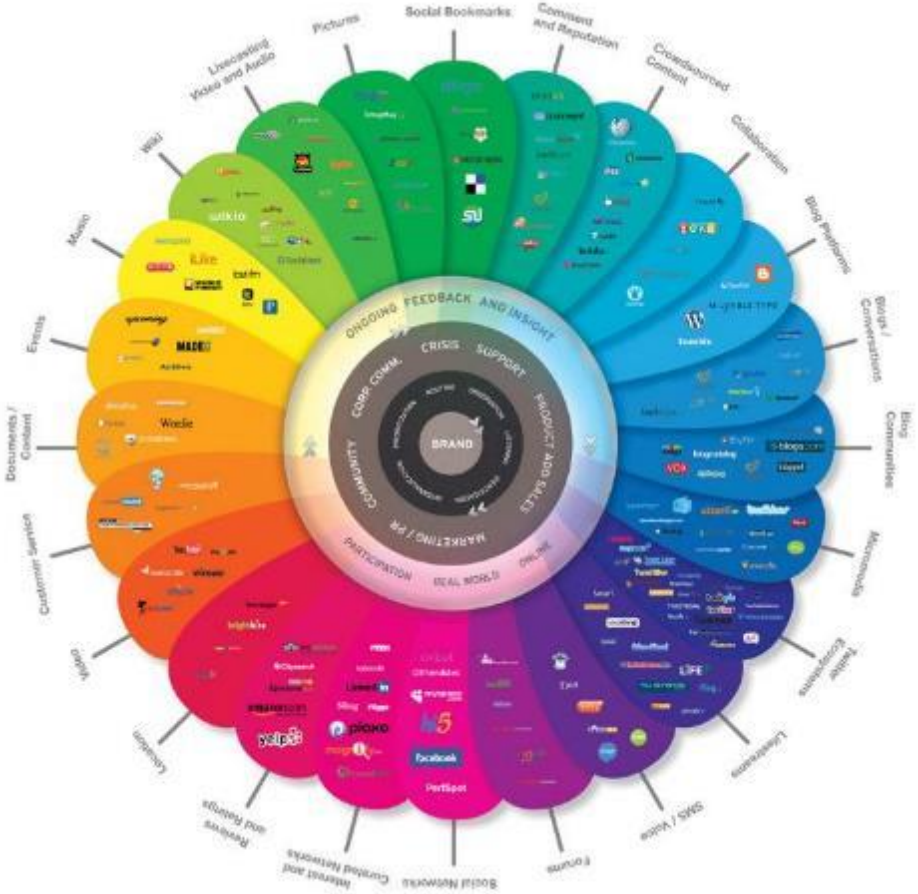
YOUR SOCIAL MEDIA PLAN

Your social media plan: Your philosophy

Your social media plan: Legal



Your social media plan: Purpose & channels



http://www.lesevangelistes.com/wp-content/uploads/2012/10/conversation-prism.jpg

Your social media plan: Multiple players

Your social media plan


With great social media opportunity . . .
comes great responsibility

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Understanding Audience Needs and Preferences

Robert B. Lull, Ph.D.
Annenberg Public Policy Center of the University of Pennsylvania
California State University, Fresno
30 June 2017

Stakeholders and Target Audiences

- **Potential benefits to including stakeholders in comm efforts:**
  - Identify gaps in knowledge
  - Understand stakeholders' risk perceptions and concerns.
  - Identify potential communication barriers.
  - Find preferred/most appropriate information sources and channels of communication.
  - Identify and address unintended consequences of the communication.

Stakeholders and Target Audiences

- **In addition, a collaborative process with stakeholders can:**
  - Generate more ideas.
  - Expose concerns not otherwise recognized.
  - Include different perspectives.
  - Potentially create buy-in and builds broad support for the communication effort.
  - Facilitate coordination of communication efforts among various governmental departments (e.g. health, agriculture, and trade) and other stakeholders sharing responsibility.

Stakeholders and Target Audiences

Identifying stakeholders and target audiences and engaging them in a two-way dialogue to inform risk communication decisions increases the chances for successful risk communication and enhanced risk management

Understanding Your Audiences

- **There are multiple publics:**
  - People differ in terms of their:
    - Interest in your message
    - Experience and education
    - Responsibilities
    - Needs and concerns
    - Cultural background
    - Etc.

Photo By: Cpl. David Flynn

Remember: There are multiple publics

Who Should be Part of Your Audiences?

- **Consider the need to communicate with people…**
  - Who will be affected
  - Are likely to *perceive* that they will be affected
    - You don't get to decide whether they *perceive* that they will be affected
    - If you don't communicate with them, sending the message that they don't matter

Who Should be Part of Your Audiences?

- **Consider including people who:**
  - Are already involved in issues related to health, safety, agriculture, animals, or the environment
  - Would feel insulted, angry, or ignored if you did not communicate with them
  - Have useful information, ideas, or insights
  - Are in official or unofficial positions of leadership, responsibility, or authority

Reaching Your Audiences

- **You must tailor messages and channels to meet the needs of your audiences**
  - Marketing professionals refer to this as “market segmentation”

- To do this, you must get to know your audiences

Reaching Your Audiences

- **"Meet" them where they are**

- **Channels**
  - TV
  - Print
  - Advertising
    - Think outside the box
      - Social Media
      - Video Games

Opinions

CDC and NIH officials: How not to fight the Zika virus

By Tom Frieden and Anthony S. Fauci August 31, 2016

AD SET

Ad Set Name	Charlottesville - 18-49
Targeting	Location - Living In: United States: Charlottesville (+50 mi) Virginia Age: 18 - 49 Language: Spanish People Who Match: Interests: National Geographic Channel Less -
Ad Placement	Facebook Feeds, Facebook Instant Articles, Facebook In-Stream Videos, Facebook Right Column, Facebook Suggested Videos, Instagram Feed, Audience Network Native, banner and interstitial and Audience Network In-stream videos
Budget & Schedule	$20.00 Daily | This ad set will run indefinitely
Optimize For	Video Views
Bid	Automatic
Pay For	Impression

Reaching Your Audiences

- **Outside the box**
  - Performance
    - "Importantly, audience members widely shared and/or discussed what they learned from the folk performances with peers, family, and community members" (Singhal et al., 2007)
- **Languages**
  - If you miss other languages, sending a meta-message that they don't matter

Recurring Theme

Avoid sending meta-messages that segments of people don't matter

- Language
- Channels
- Understanding *their* perceptions
  - Affected?
  - Relevant?

This is a lot easier to remember when we think in terms of multiple publics rather than "the public"

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Message Mapping

William K. Hallman, Ph.D.

Single **O**verarching **C**ommunication **O**bjective

- SOCO

- What is the *one* message or action your key stakeholder(s) needs to understand?
  - What is the *one* headline message you would want to see:
    - In tomorrow's newspaper, TV, or radio broadcast?
    - Go viral on social media?

Message Mapping

- Developed by Vince Covello based on political communication strategies

Message Mapping

- Functions as a structure for creating hierarchically organized responses to questions or concerns *before* needing to communicate
  - Designed to:
    - Anticipate public and stakeholder concerns and questions
    - Provide a framework for organizing key information
    - Help constrain and simply messages so they are clear and concise
    - Promote message consistency

Message Mapping

- He argues that people can only process a limited number of things at a time
  - So during high stress situations:
    - Present 3 key messages
    - Repeat the key messages 3 times
    - Prepare 3 supporting messages for each key message

Goal

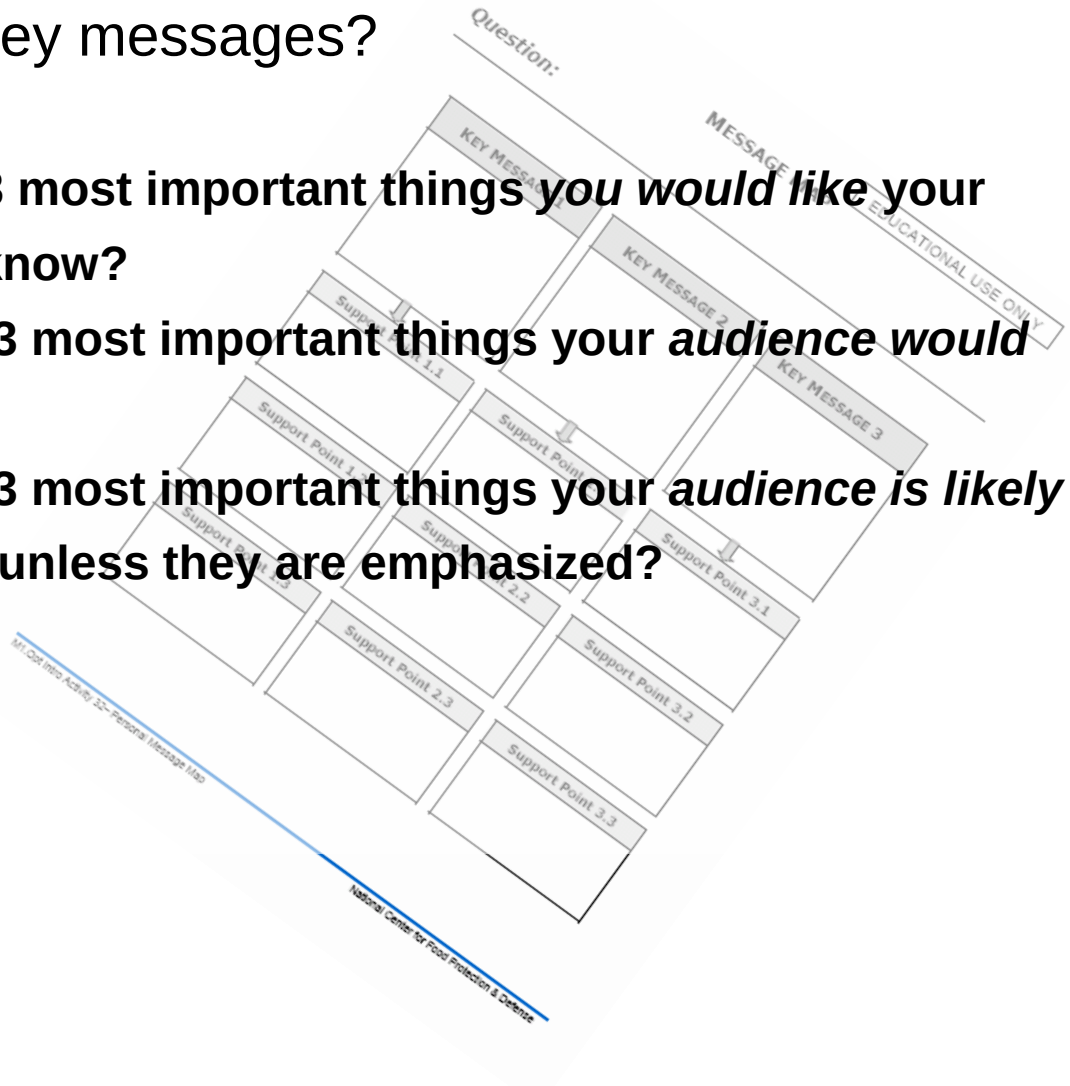
- Deliver 3 key messages in 9 seconds
  - in a total of 27 words with each key message averaging 9 words in length

- The “27/9/3 Template”

Message Mapping

- What are your key messages?

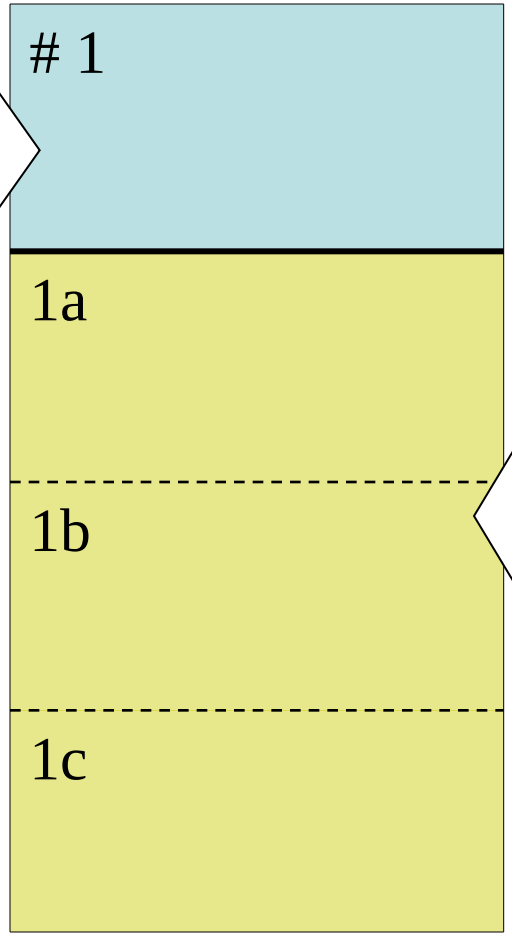
1. **What are the 3 most important things *you would like* your audience to know?**
2. **What are the 3 most important things your *audience would like* to know?**
3. **What are the 3 most important things your *audience is likely to get wrong* unless they are emphasized?**



Message mapping

Key Message

Should be able to stand alone



3 Supporting Ideas

- ***Supporting factual information***
- ***Visual aids***
- ***Citations to credible third parties info***
- ***Sources of more information***

What should I know about anthrax ?

1. Anthrax is a disease that can affect people & animals.	2. Anthrax occurs naturally in the soil.	3. Anthrax is both preventable and treatable.
1a *Anthrax is caused by bacteria that form spores.*	**2a** *Anthrax occurs worldwide.*	**3a** *Effective vaccines are available for livestock.*
1b *The spores can be inhaled, swallowed or enter the skin (contact).*	**2b** *Spores are resistant to disinfectants.*	**3b** *Vaccines for humans are developed & can be used prior to or after exposure.*
1c *Animals most commonly affected are cattle, sheep & goats.*	2c *Anthrax spores can survive for many years in soil without an animal host.*	**3c** *Early treatment with antibiotics can be effective.*

Benefits of Message Maps

- They focus your efforts on providing messages that are:
  - simple,
  - clear,
  - concise

Limitations of message maps

- They focus on the wording of the message
  - While very important, there is much more to risk communication than getting the words right
- Pre-packaged message maps may give a sense of overconfidence that you have adequately prepared for crisis communications
  - Each situation unfolds differently and has its own contexts, nuances, and affected audiences
- Message maps don’t take into consideration who is delivering the message, or the context or the setting in which it is delivered

Activity

Assume that the application is approved

Develop a clear, concise single overarching message (single overarching communication objective) that you would want to be communicated to the public.

- Develop at least 3 supporting messages. Think about:
  1) What the public will want to know?
  2) What you believe the public needs to know?
  3) What the public is likely to get wrong, that you need to address?

- Who is the main audience or population segment you would like this message to reach? Who is the secondary audience?