Translating the Science of Food Sustainability

How Nutrition Education Can Help

July 24, 2018

OPTIMIZING IMPACT
Supporting Food Systems with Nutrition Education
SOCIETY FOR NUTRITION EDUCATION AND BEHAVIOR
2018 Annual Conference
JULY 21-24 • MINNEAPOLIS MINNESOTA

Presented by Mark David Richards,
Senior Vice President, Managing Supervisor

KRC RESEARCH
OUR INSIGHT. YOUR BREAKTHROUGH.

WEBER SHANDWICK
engaging always.

Today’s presentation

- ☑ The current environment: sustainability, nutrition, and science
- ☑ How people make sense of information
- ☑ Honing the message: two examples
- ☑ Ideas for translating the science of food sustainability


Communicating factual information requires more than facts to win hearts and minds

The Environment

- ☑ Information overload
- ☑ Rapid changes driven by science and discovery
- ☑ Cultural changes, beliefs and norms
- ☑ Low-levels scientific literacy: confusion
- ☑ Skepticism and distrust of institutions and leaders
- ☑ Perception of conflicting information

Source: U.S. Farmers & Ranchers Alliance survey conducted by Morning Consult
among 1,917 U.S. registered voters, Feb. 16-19, 2017

- **78% of registered voters have a favorable view of agriculture and farming—35% *very* favorable**

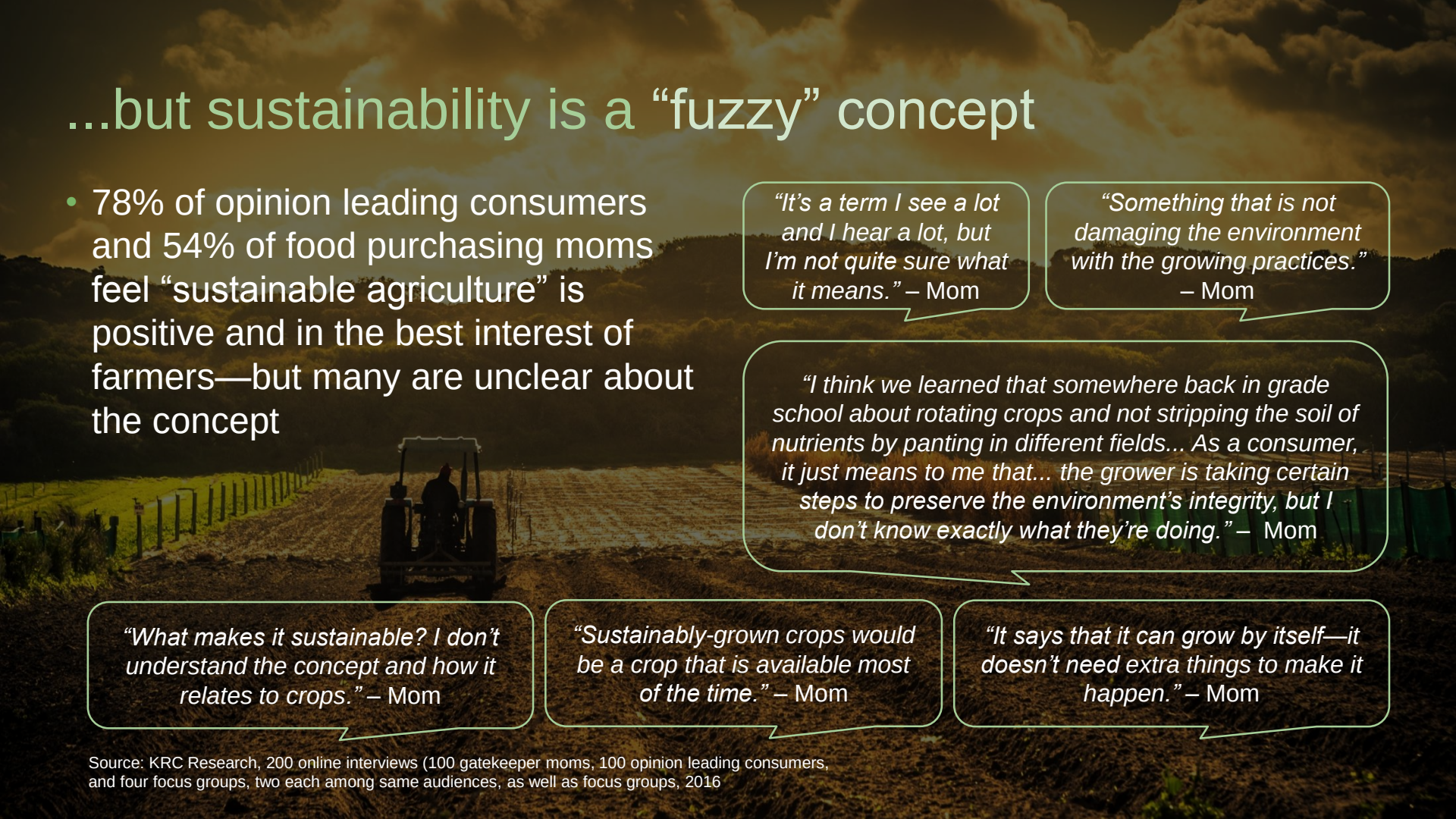
Sustainability is seen positively...

- ☑ 59% say it is important that food products they purchase or consume are produced in a sustainable way—21% very important, 38% somewhat important (only 10% not important)
- ☑ Top aspects of sustainability among those who say it is important: reducing pesticides, affordable food, conserving natural habitat, sufficient food for growing population

Source: International Food Information Council (IFIC) Foundation, survey of 1009 U.S. adults 18-80, March 2018

...but sustainability is a "fuzzy" concept

- 78% of opinion leading consumers and 54% of food purchasing moms feel "sustainable agriculture" is positive and in the best interest of farmers—but many are unclear about the concept



"It's a term I see a lot and I hear a lot, but I'm not quite sure what it means." – Mom

"Something that is not damaging the environment with the growing practices." – Mom

"I think we learned that somewhere back in grade school about rotating crops and not stripping the soil of nutrients by panting in different fields... As a consumer, it just means to me that... the grower is taking certain steps to preserve the environment's integrity, but I don't know exactly what they're doing." – Mom

"What makes it sustainable? I don't understand the concept and how it relates to crops." – Mom

"Sustainably-grown crops would be a crop that is available most of the time." – Mom

"It says that it can grow by itself—it doesn't need extra things to make it happen." – Mom

Source: KRC Research, 200 online interviews (100 gatekeeper moms, 100 opinion leading consumers, and four focus groups, two each among same audiences, as well as focus groups, 2016

Half think the U.S. food system is mostly sustainable—but 24% are not sure...

How sustainable is the current U.S. food and agricultural system over the long-term?

Source: KRC Research, survey of 1,206 U.S. adults conducted July 19-20, 2018
(no definition of sustainability provided)

Top 5 Goals to Help Make U.S. Food & Agriculture More Sustainable

- ☑ 51% store and use water more efficiently
- ☑ 50% preserve and protect forests, land, wildlife habitat, and biodiversity
- ☑ 50% Reduce hunger, food insecurity, malnutrition, and food waste
- ☑ 49% Use fewer pesticides, insecticides, and herbicides
- ☑ 43% Promote soil health, use fertilizers more efficiently, and decrease erosion and runoff

Source: KRC Research, survey of 1,206 U.S. adults conducted July 19-20, 2018

Question: "Here is a list of goals to help make U.S. food and agriculture more sustainable. If you had t choose, over the next decade, which FIVE do you think should be given the highest priority?"

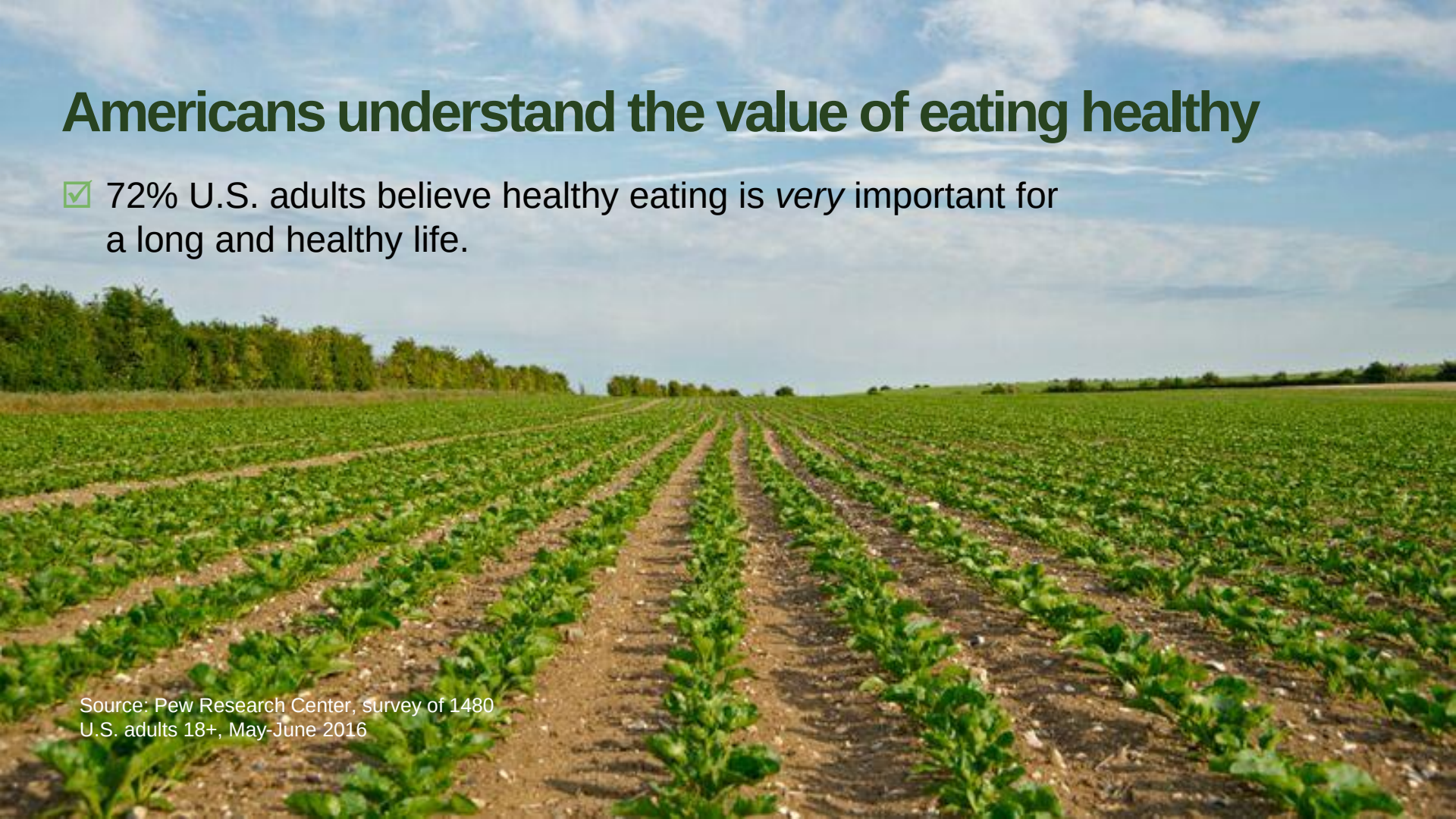
Other Goals to Help Make U.S. Food & Agriculture More Sustainable *(rank order top to bottom)*

- ☑ 41% make forestry, farming, livestock, dairy, and fisheries more productive
- ☑ 41% reduce air pollution and greenhouse gas emissions
- ☑ 40% improve the livelihood and wellbeing of farmers and farm workers
- ☑ 38% increase use of new technologies and tools to farm more sustainably
- ☑ 26% switch to alternative crops that are more sustainable
- ☑ 19% reduce the consumption of meat

Source: KRC Research, survey of 1,206 U.S. adults conducted July 19-20, 2018

Americans understand the value of eating healthy

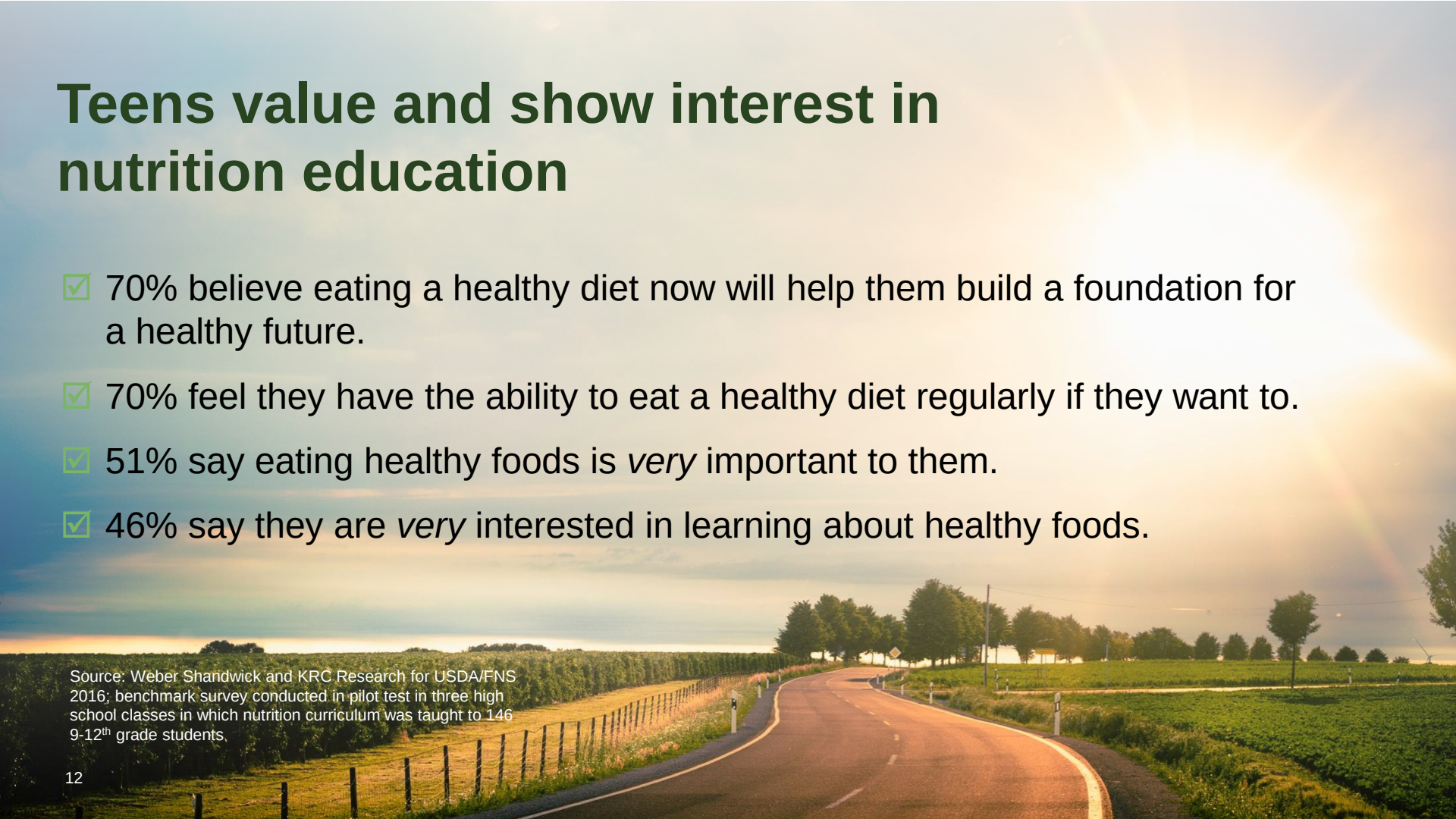
- ☑ 72% U.S. adults believe healthy eating is *very* important for a long and healthy life.



Source: Pew Research Center, survey of 1480 U.S. adults 18+, May-June 2016

Teens value and show interest in nutrition education

- ☑ 70% believe eating a healthy diet now will help them build a foundation for a healthy future.
- ☑ 70% feel they have the ability to eat a healthy diet regularly if they want to.
- ☑ 51% say eating healthy foods is *very* important to them.
- ☑ 46% say they are *very* interested in learning about healthy foods.



Source: Weber Shandwick and KRC Research for USDA/FNS 2016; benchmark survey conducted in pilot test in three high school classes in which nutrition curriculum was taught to 146 9-12th grade students.

- ☑ 80% came across conflicting information about food and nutrition.
- ☑ 59% who came across conflicting information said it makes them doubt their choices.

Source: International Food Information Council (IFIC) Foundation, survey of 1009 U.S. adults 18-80, March 2017

CNN Health » 'Healthy' foods have most of us confused, survey finds

'Healthy' foods have most confused, survey finds

By Jacqueline Howard, CNN

Updated 4:05 PM ET, Tue May 16, 2017

Conflicting facts—magnified by controversy— undermines trust

- ☑ 61% think new research is constantly improving our understanding about the health effects of food so it makes sense that findings conflict.
- ☑ 37% think research about the health effects of food cannot be trusted because many studies conflict.

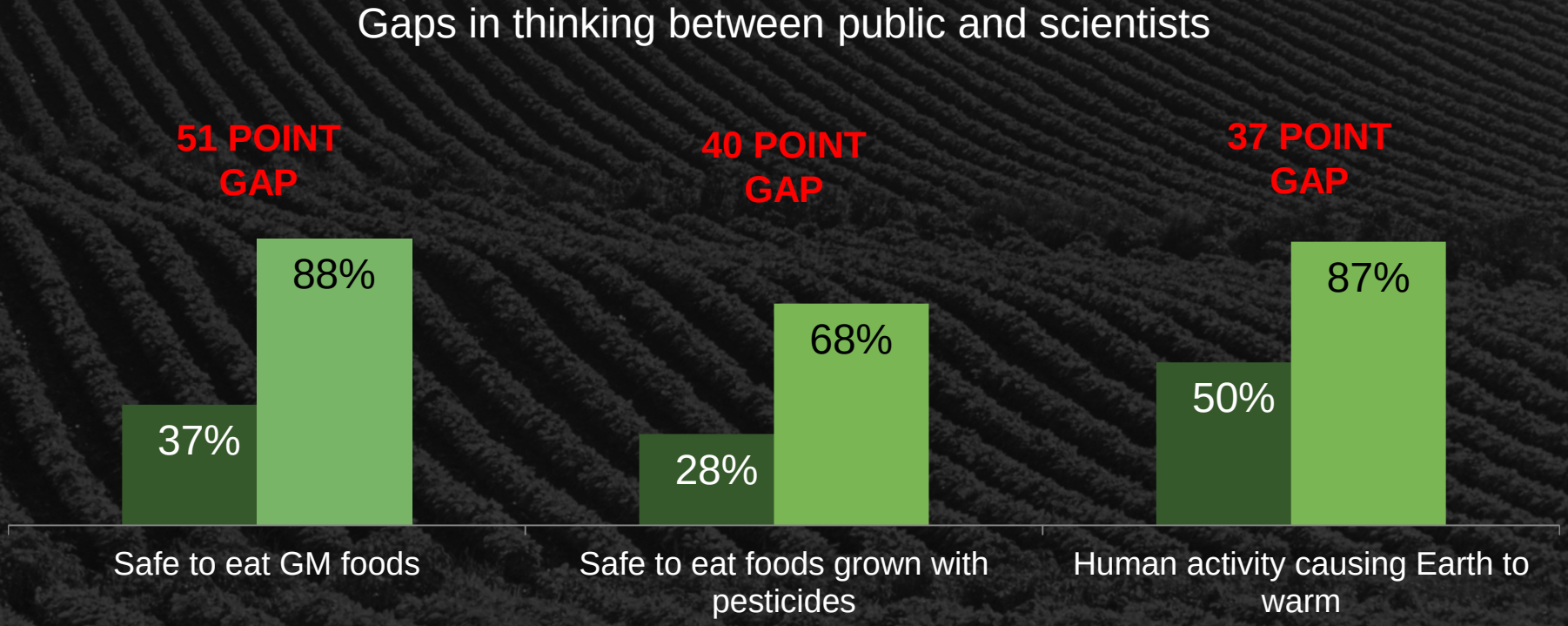
Source: Pew Research Center, survey of 1480 U.S. adults 18+, May-June 2016

Public confidence in science is quite high

- ☑ 76% of U.S. adults have at least a fair amount of confidence in scientists.
- ☑ 62% of U.S. adults believe science has had a mostly positive effect on the quality of food.

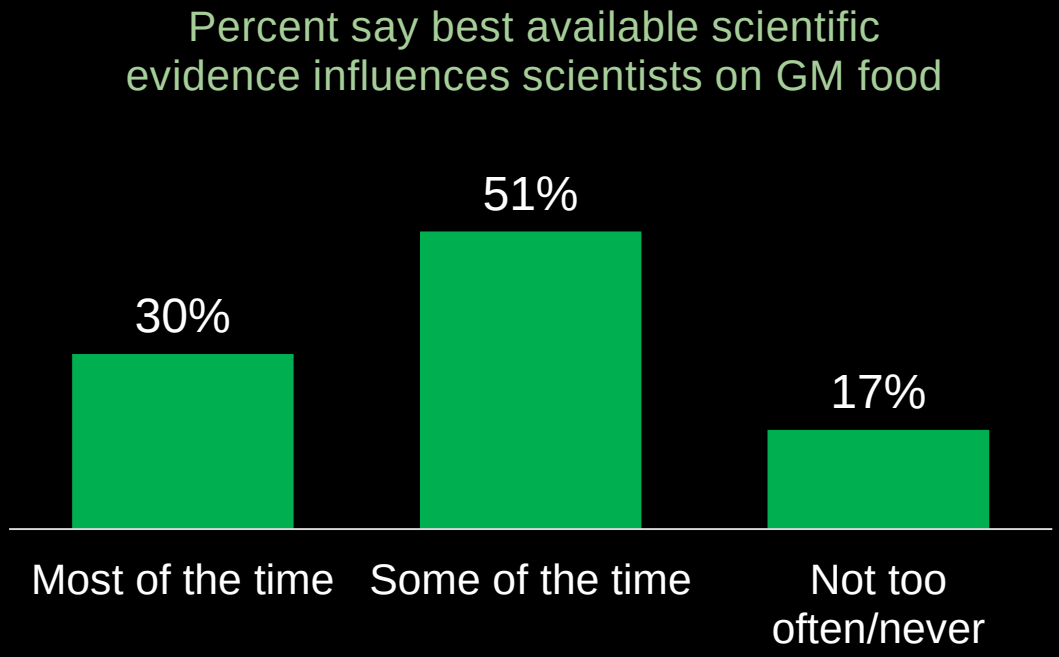
Sources: Fall 2017 edition of Issues in Science and Technology,Pew Research Center survey, May-June 2016, U.S. adults; Pew Research Center, 2014

But there are gaps between expert and public opinion



Source: Pew Research Center, 2014, 2,002 U.S. adults, 3,748 U.S members of American Association for the Advancement of Science (AAAS).

On some topics, consumers question whether decisions are evidence based

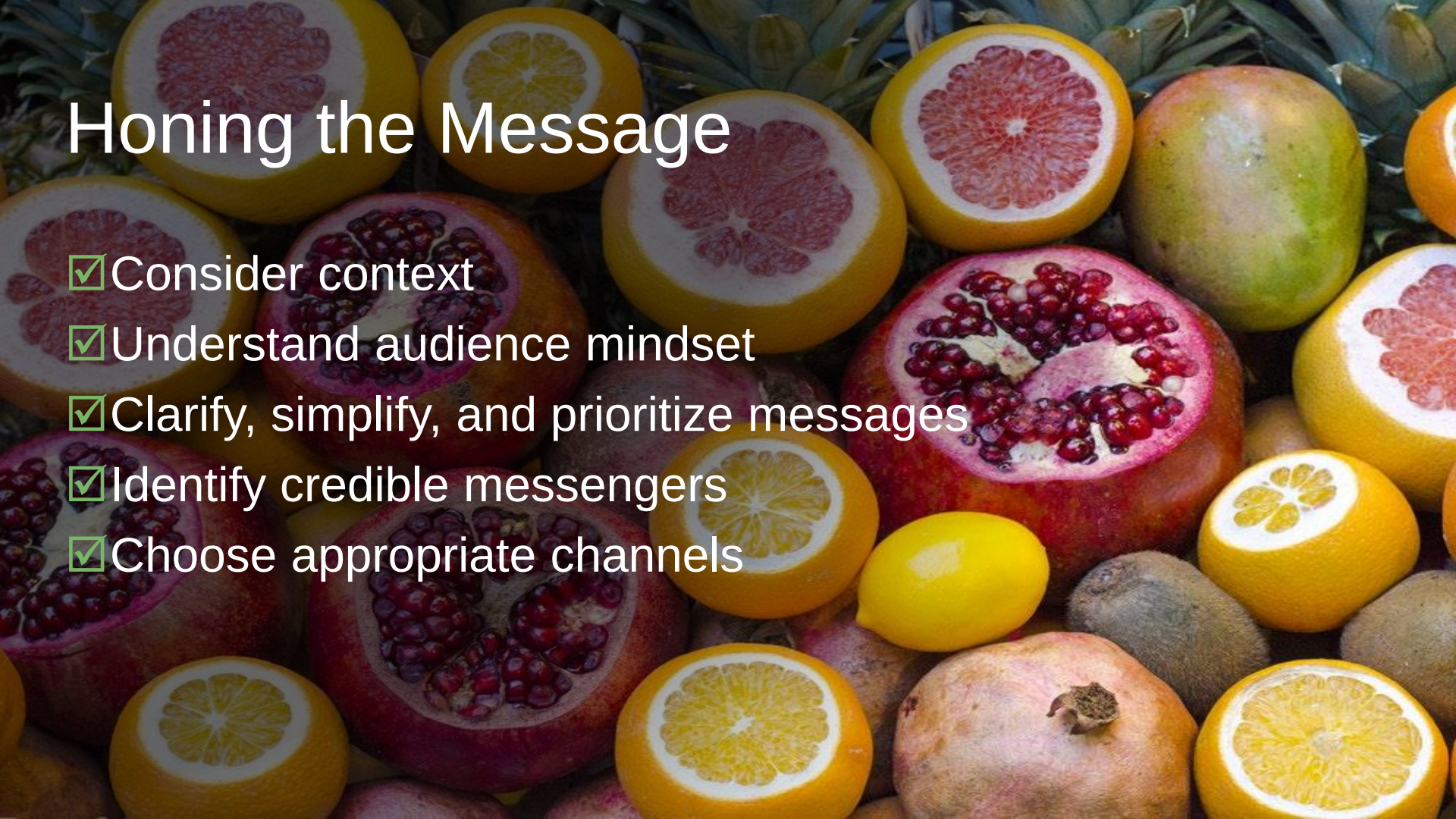


Source: Fall 2017 edition of Issues in Science and Technology, Pew Research Center survey, May-June 2016, U.S. adults

How people make sense of information

- ☑ Experience
- ☑ Expert opinion and trusted sources
- ☑ Socio-cultural filters (values: faith, ideology, morals)
- ☑ Perceptual short-cuts (heuristics: risk perception)

Honing the Message



- ☑ Consider context
- ☑ Understand audience mindset
- ☑ Clarify, simplify, and prioritize messages
- ☑ Identify credible messengers
- ☑ Choose appropriate channels

Recognize unspoken questions

Your message

When you provide information, your audience is wondering…

- Why should I care—how does this affect me?
- Is the information credible—is that true?
- What is this person's motive—or bias?
- What do they know—are they certain? Or are they downplaying a risk?
- What are they not telling me?
- Why did they pick those words or facts—what are the words or facts covering up?
- Do they care about people?
- Do I relate to them?
- Can I trust them?

Two Examples

NUTRITION EDUCATION

Teaching Teens About Nutrition & Physical Activity

and

SCARY FOOD SCIENCE

Communicating healthfulness in the context of conflicting food values

People eat junk food without batting an eye but offer them something healthy and they become researchers.

https://www.pinterest.com/pin/401875966733343103/

First Example: Nutrition Education

There are nearly 42 million teens in the U.S.*

1 in 5

OF THESE ADOLESCENTS ARE OBESE,

leaving them at increased risk for a host of weight-related diseases, from type 2 diabetes to premature heart disease.

*US Census Bureau and Department of Health and Human Services, 2014

Communicating About Nutrition to Teens

In a USDA/FNS SNAP-sponsored needs assessment, the **Panum Group** found a gap in available tools to promote healthy eating and increased physical activity among teens — especially those from low-income families.

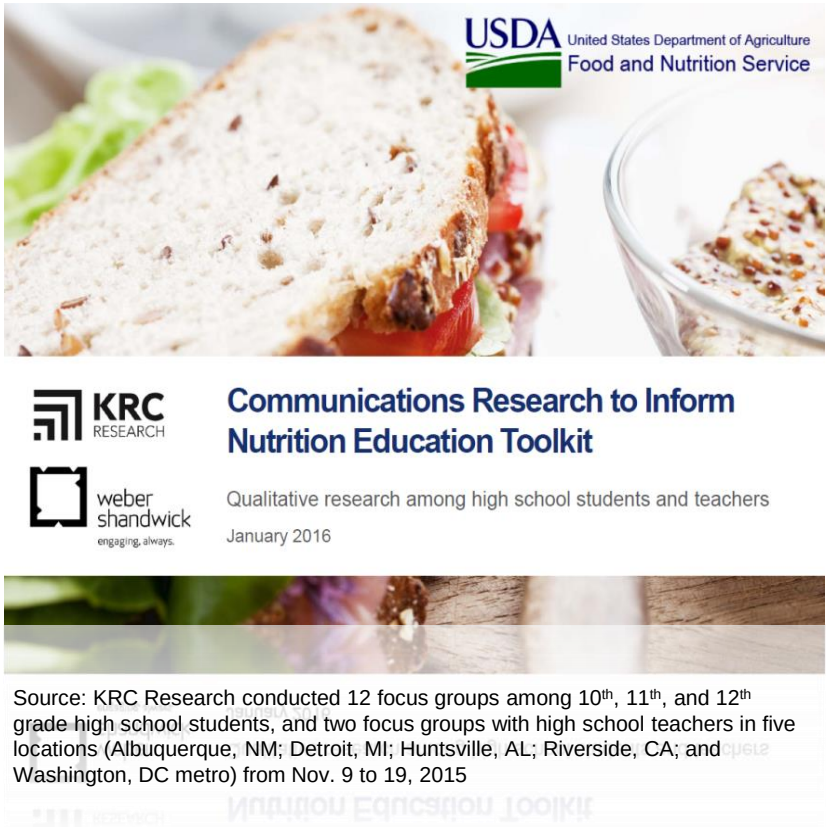
Weber Shandwick and **KRC Research** were engaged to help:

Conduct formative research with high school educators and teens

Develop a nutrition and physical activity curriculum for teens to fill this gap

Test the curriculum in a *small-scale pilot project* to gather preliminary insights for program improvement

Formative Audience Insights



Source: KRC Research conducted 12 focus groups among 10th, 11th, and 12th grade high school students, and two focus groups with high school teachers in five locations (Albuquerque, NM; Detroit, MI; Huntsville, AL; Riverside, CA; and Washington, DC metro) from Nov. 9 to 19, 2015

1. **Most teens care about food, health and physical activity.**

2. **Many exercise, but eating healthfully is not a top priority.**
   - Cost and taste are the two most common barriers cited to healthy eating.

3. **They report feeling better if they are active and eat healthfully.**
   - They see overweight and unhealthy adults, and say they don't want to be like that.

4. **Many find health class boring, because it lacks personal relevance and practical information.**

How to Engage Students in Health and Nutrition

Engaging, personal and relatable	1st	Care about appearance and athleticism
Group motivation	1st	Like social interaction
Learn about favorite foods	2nd	Flavor and taste
Practical	3rd	Building skills and more autonomy
Competitive		Motivated by fun, low-key competition

What Teachers Want in Health Classc

A curriculum that:

Aligns with teaching requirements – sometimes determined by others

Ready to use

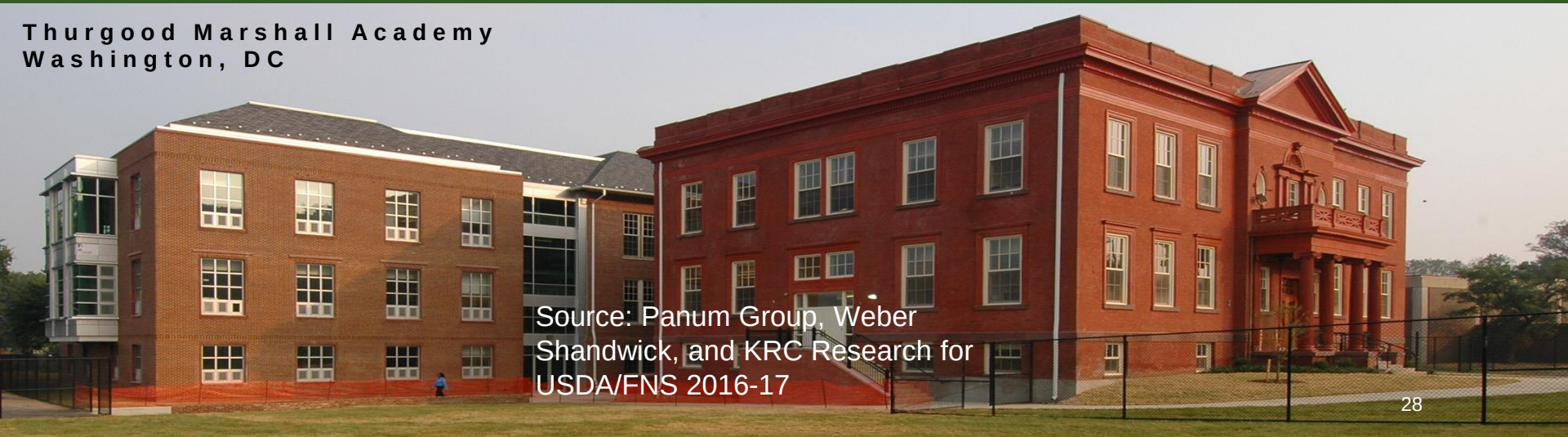
Flexible so they can pick and choose what to use

Scalable (multiple modules)

Offers a sense of ownership for students

https://snaped.fns.usda.gov/snap/PowerUp/PowerUpCurriculum.pdf

Pilot Test: Three schools, 146 high school students



Source: Panum Group, Weber Shandwick, and KRC Research for USDA/FNS 2016-17

Pilot Test Research Design

Small-Scale Pilot Field Test Model

All pilot project schools have:

- More than 50% of students qualify for free or reduced lunch
- Students in grades 9 – 12

Curriculum:

- Completed required lessons, but variation on what was used beyond these
- All students exposed to six hours class time
- At least one supplemental activity administered

The Curriculum Appealed to Students and Teachers

In post-focus groups, teachers and students unanimously said they enjoyed the program, were enthusiastic about the learning experience, said it was better than prior experiences.

Student post-survey evaluations:

Among the benefits cited by teachers:

- Program's flexibility
- Ease of implementation
- Comprehensive, engaging and hands-on material

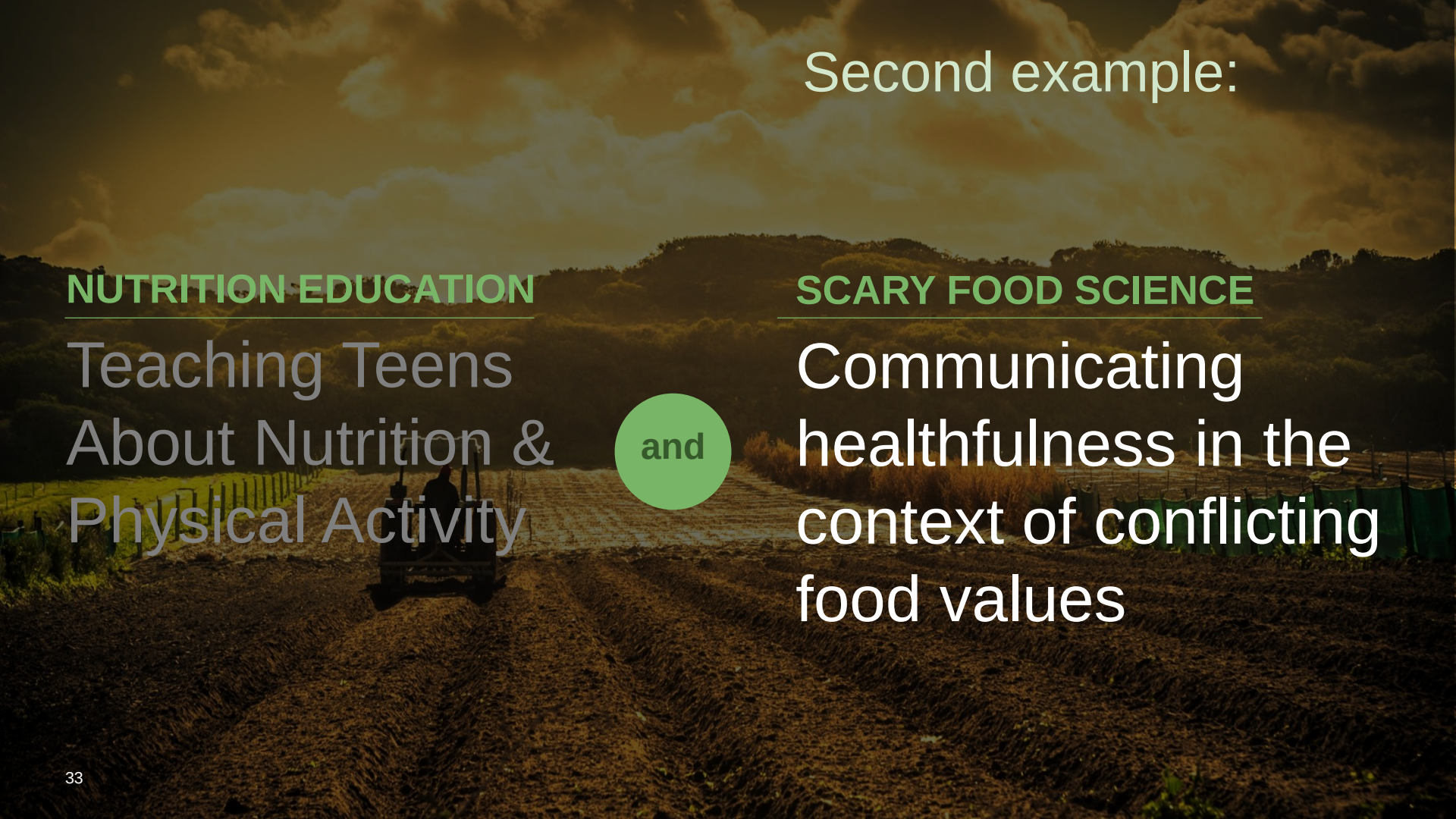
Key Lessons

1. **Teens are interested—and learn effectively when they engage in activities with peers.**

2. **Even a few hours of nutrition education can inform and excite teens.**
   - Teens are open to learning new tricks and skills they can apply regularly in their lives.

3. **Teens do not easily absorb facts—but they remember and apply information they can use in their own lives.**
   - Calorie + Exercise equation

4. **Teens can be agents of change in their families and among peers.**
   - This may be a new way to multiply dissemination of health-related information to families and peers. This aligns with policy, systems, and environment (PSE)



Second example:

NUTRITION EDUCATION

Teaching Teens About Nutrition & Physical Activity

and

SCARY FOOD SCIENCE

Communicating healthfulness in the context of conflicting food values

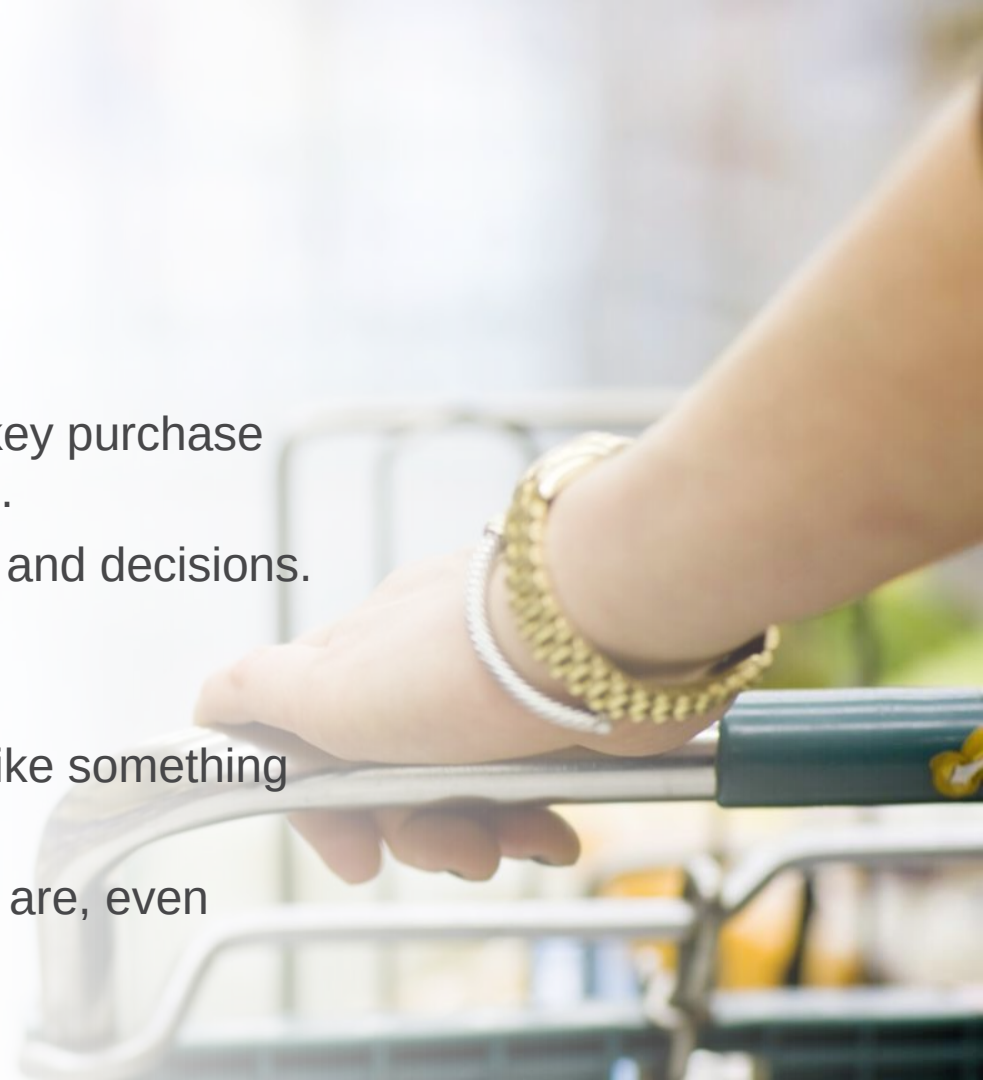
GMOs: Case Study

FOOD PURCHASE ATTITUDES

- Science matters, but emotions rule.
- Taste, price, familiarity, healthfulness key purchase drivers—busy moms strive for balance.
- Moms expect respect for their choices and decisions.

GMO ATTITUDES

- GMOs scary and unfamiliar—sounds like something bad is being added to food
- Most are open to learning what GMOs are, even intrigued about possible benefits



Words matter

	Positive %	Neutral %	Negative %
Sustainable agriculture	**66**	**31**	**4**
Diversity of plant varieties	**60**	**35**	**6**
Plant biology	49	**47**	5
Genetic diversity	47	**46**	8
Genetic science	43	**48**	10
Plant Genome Project	27	**62**	12
Genetically modified plants	16	37	**48**
Genetically engineered plants	14	41	**45**
Genetically modified organisms	12	38	**51**
GMO	8	42	**50**

Source: KRC Research, survey of 200 adults

Factors that Influence Risk and Benefit Perceptions

- ☑ Consumers use judgmental heuristics, or "rules of thumb" to assess risk/benefit
  - "Better safe than sorry."
  - "Accidents happen."
  - "Where there is smoke there is fire."

Less Risky	More Risky
Natural	Manmade
Voluntary	Involuntary
Familiar	Unfamiliar
Controllable	Uncontrollable
Controlled by self	Controlled by others
Fair	Unfair
Not memorable	Memorable
Not dreaded	Dreaded
Chronic	Acute

Consumer Barriers	Insights
Interest in the topic, but confusion about what GMOs are and if they are safe	Opportunity to educate: GMO is an advanced farming method that has benefits, not food with scary additives
Confusion and guilt about making a bad choice for families	Fill the void with information on safety and benefits of GMOs
Skepticism – they don't know who or what to trust	Trusted voices can be effective messengers

WE LEARNED WE MUST EXPLAIN

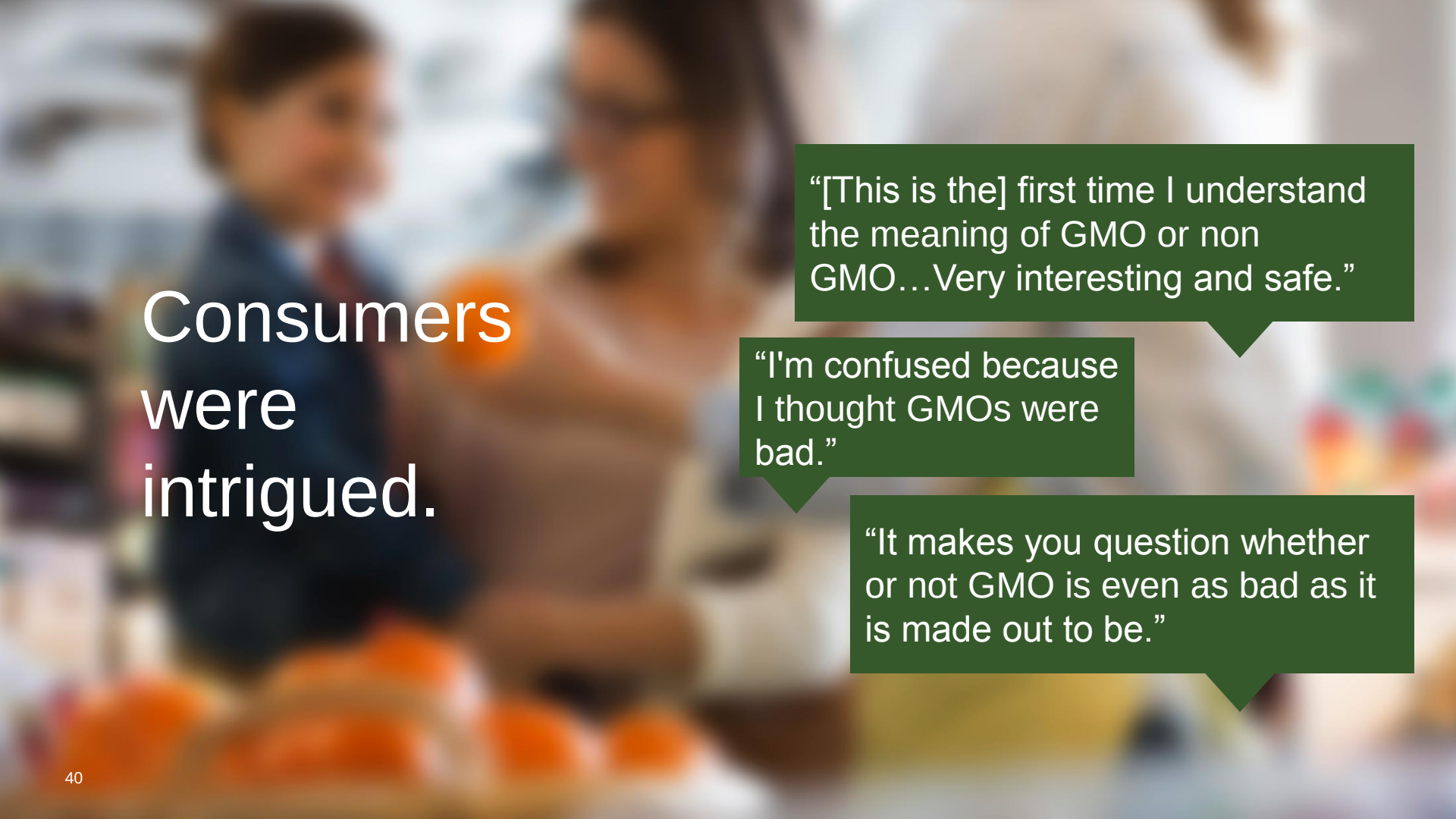
...what GMO is – advanced farming method – and isn't

...benefits, like less pesticides

...that scientists agree on safety

Reactions were positive

- ☑ Attention getting
- ☑ Interesting
- ☑ Informative
- ☑ Important
- ☑ Makes people want to find out more
- ☑ Makes people feel more positive about the use of GMOs in farming

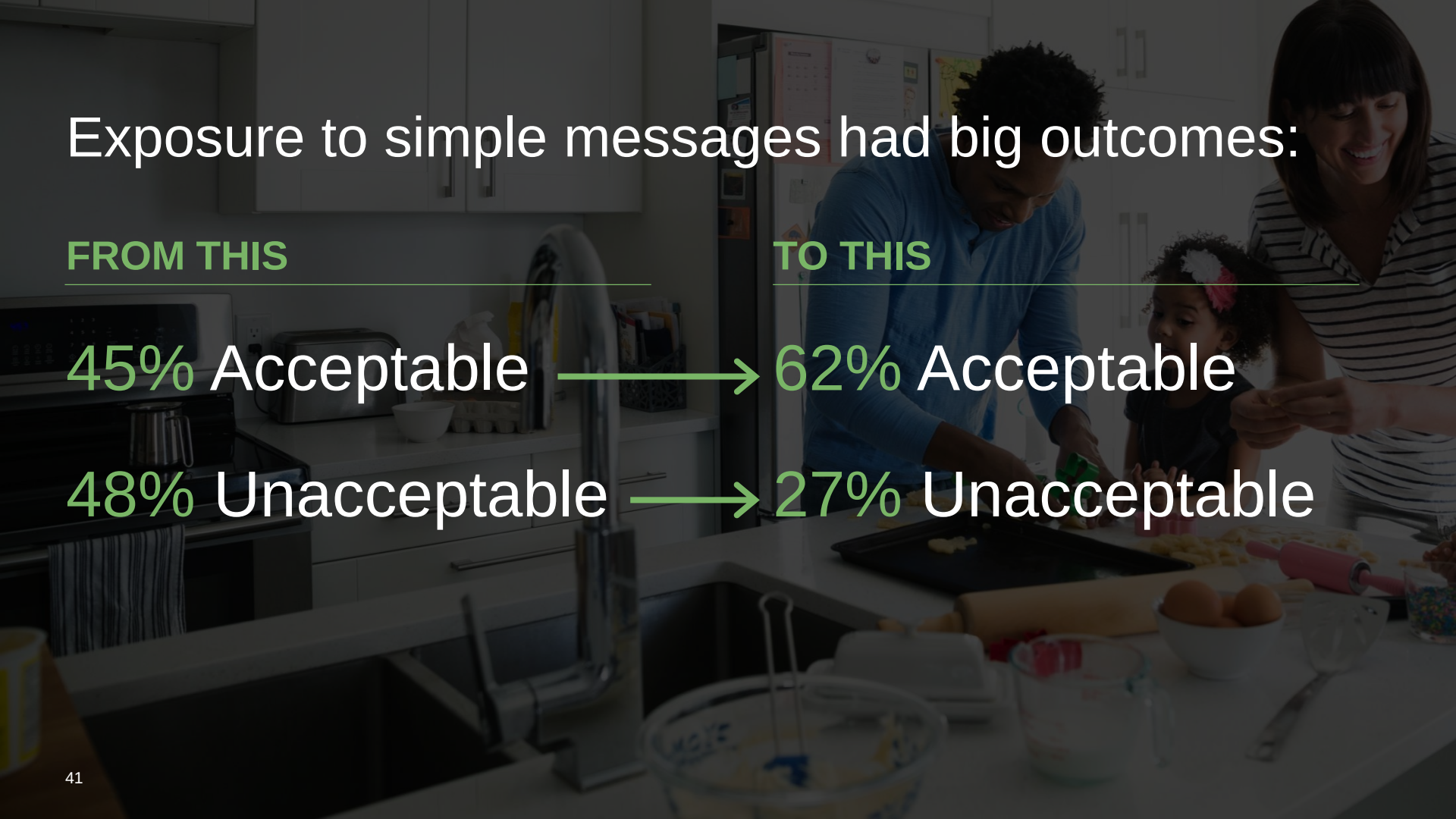


Consumers were intrigued.

"[This is the] first time I understand the meaning of GMO or non GMO…Very interesting and safe."

"I'm confused because I thought GMOs were bad."

"It makes you question whether or not GMO is even as bad as it is made out to be."



Exposure to simple messages had big outcomes:

FROM THIS		TO THIS
45% Acceptable	→	62% Acceptable
48% Unacceptable	→	27% Unacceptable

Ideas for translating the science of food sustainability

1

Listen to your audience

- Know the facts—and if there is disagreement among experts
- Understand how people feel, what they value, their priorities, and concerns
- Know what they want to know—may not ask

2

Simplify and hone your message

- Pick smart terms
- Avoid jargon—sounding smart doesn't win hearts
- Paint a clear picture
- Explain what and why
- Connect with people—put compassion above statistics

3

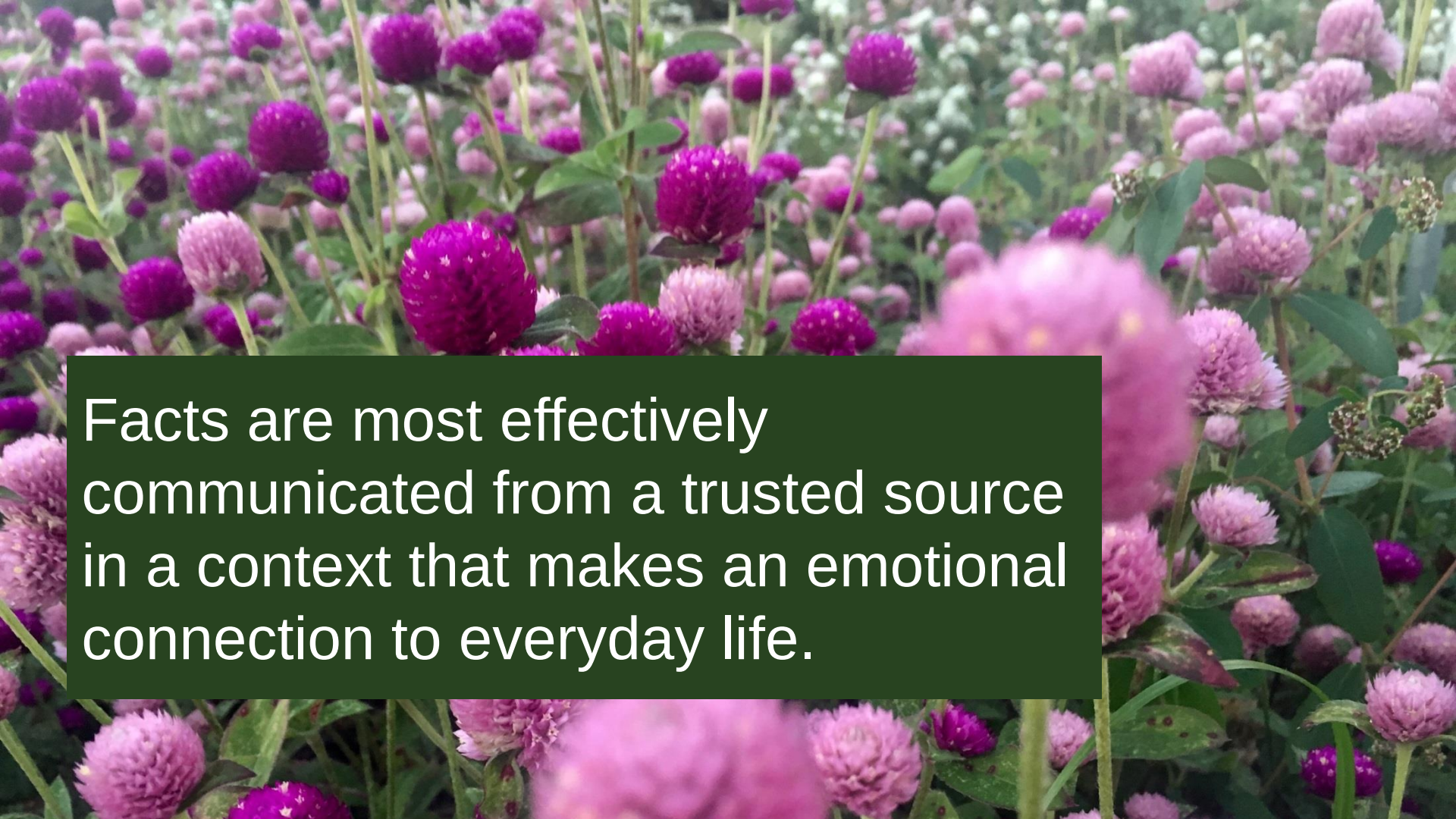
Engage trusted messengers

- People mainly believe people who share their values and who they relate to
- Engage the creative—engage artists and communicators who touch hearts *and* minds

4

Target your message

- Rarely can we reach everyone—target the message to audiences that are interested
- Umbrella messaging with targeted digital communications can deliver results


Facts are most effectively communicated from a trusted source in a context that makes an emotional connection to everyday life.


Thank you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July 7, 2018

The 2018 Artists & Climate Change Incubator

New York City Monday-Friday, August 6-10, 2018 10am-5:30pm Fee: $425 Leader: Chantal Bilodeau Calling artists, activists, scientists, and educators who want

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