



Upside Down Fate:
Analysis of a Priming Survey Exploring Views of the Food System

Prepared for the Frameworks Institute
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Introduction

This report summarizes findings of a national telephone survey of 3,294 adults conducted for the Frameworks Institute in March 2006 to determine the effects of various conceptual frames on people's understanding of the food system and their support for related policies. The survey was developed based upon findings from earlier research conducted for the FrameWorks Institute.¹

Throughout, the report will refer to the concept of "framing." The FrameWorks Institute defines framing as referring to "the way a story is told -- its selective use of particular symbols, metaphors, and messengers, for example -- and to the way these cues, in turn, trigger the shared and durable cultural models that people use to make sense of their world" (Bales and Gilliam, 2002). Research on how people think demonstrates that people use mental shortcuts to make sense of the world, and that new information provides cues to help people determine how to connect the new information to what they already know. This lens on the issue then quickly defines issue understanding, priority, consequences, solutions and responsibility for fixing the problem. This is framing. (Note: For more information on frames and framing, see the FrameWorks Institute web site at www.frameworksinstitute.org.)

¹The survey was informed by the following research conducted for the FrameWorks Institute:
"Conceptualizing US Food Systems with Simplifying Models: Findings from the TalkBack Testing," by Cultural Logic, April 2006.
"The Food Chain: Linking Private Plate to Public Process, an analysis of qualitative research exploring perceptions of the food system," by Public Knowledge, January 2006.
"Harmful and Productive Patterns in Newspaper Representations of Food Systems," by Cultural Logic, August 2005.
"All Trees and No Forest: How advocacy paradigms obscure public understanding of the food system," by Cultural Logic, July 2005.
"Digesting Public Opinion: A meta-analysis of attitudes toward food, health, and farms," by Public Knowledge, July 2005.
"Not While I'm Eating: how and why Americans don't think about food systems," by Cultural Logic, June 2005.

Executive Summary

We are living in a world today where lemonade is made from artificial flavors and furniture polish is made from real lemons. ~Alfred E. Newman

Many Americans recognize what this fictional character ridicules – priorities in the food industry are upside down, raising questions about what misplaced priorities will mean for the fate of future generations. Food is moving further away from traditional methods of production, but most Americans feel powerless to affect it. In the focus group research prior to this phase, participants repeatedly indicated that modernization is inevitable and is likely to result in food with less flavor and more processing. As they consider solutions to right the system, people dismiss small farms' ability to play a substantive role in food production. Instead, they assume consumers have the ultimate power to shape the system.

Research prior to the survey suggested that a number of elements are essential to convince the public the food system *needs* change and *can* be changed. An effective frame for the food production system requires:

- 1) a demonstration that it is possible to improve the system,
- 2) a chain of connections between choices in food production and consequences in nutrition, food safety, and so on,
- 3) motivational values such as future, protection, stewardship, and reciprocity or giving back to the community,
- 4) a role for government and citizen action that will result in change, and
- 5) a simplifying model to make the food system more visible for the public.

This strategy results in stories that are dramatically different from the dominant food-health stories that exist in today's media environment.

To test the influence of the recommendations, this survey included three values-based frames and a simplifying model suggested by earlier research. All reframes were designed to address the recommendations listed above: include solutions; make connections, and incorporate a role for government and citizen action. As described in the method section of this report, the experiments differed in the inclusion of the simplifying model and in the core value associated with the frame. One values-based frame emphasized legacy and the system we leave in place for future generations, another highlighted safety and the need to protect public health, while a third communicated local communities and the interdependence between rural and urban communities.

While all three values-based frames and the simplifying model advance the conversation in some respects, the Legacy Frame shows the greatest ability to stimulate widespread rethinking of this issue. When survey participants consider the Legacy Frame's description of the long-term consequences of short-term decisions, they are motivated to

act to protect their children and grandchildren. In addition, the Legacy Frame and the Runaway Food System model reinforce each other, since both point to concerns about structural weaknesses that affect health, environment and economy now and into the future.

The Legacy Frame significantly increases support for ten of twelve tested policies. In addition, it creates beneficial shifts in nearly every attitudinal indicator in the survey, including concerns about the food system, priority of addressing problems, importance of local food production, attribution of responsibility for fixing problems, and planned consumer purchase patterns. Furthermore, it creates beneficial shifts among nearly every demographic group in the survey, demonstrating that it has widespread appeal.

Communicators have a remarkable opportunity to alter Alfred E. Newman's vision of a lemonade legacy filled with artificial flavors and replace it with a legacy of nutritious, sustainable, locally grown foods. This research demonstrates that public understanding and support for fixing the food system can be considerably expanded by communicating the right frame elements.

Method

This survey was designed to quantify the effects of various frames identified in previous FrameWorks research on public attitudes toward the food system and on public support for food system policies. This survey incorporated a series of “priming” experiments to cue specific frames, and then determine the extent to which exposure to those frames subsequently influenced reasoning and attitudes about rural areas. Specifically, survey respondents were exposed to a set of questions at the beginning of the survey designed to “prime” or predispose a particular way of thinking. Then all interviewees responded to the same set of core questions about the food system. By comparing the responses of those exposed to different priming language with the responses of a control group, we can determine the relative ability of each frame to advance a policy menu, thereby indicating the effects of a communications frame on public opinion.

Each framing experiment was tested with a national sample of adults drawn proportionate to population. Initially, the 3,294 survey respondents were randomly assigned to either a control group, which received no deliberate framing, or one of three experimental reframes:

- **The Legacy Frame** communicates the consequences of current food production choices for future generations and the long-term viability of the food system.
- **The Protection Frame** highlights the dangers of current food production choices and the actions needed to protect the public.
- **The Reciprocity Frame** features the status of local communities and the interdependence between rural communities and the rest of the nation.

A second experiment tested the effectiveness of a Simplifying Model² which provides a vivid picture of the problems inherent in the current food system and their consequences.³ In this experiment, the 3,294 survey respondents were randomly assigned to a control group, which received no deliberate framing, or to a test group that exposed respondents to a short statement reflecting the Simplifying Model.

- **The Runaway Food System** simplifying model is intended to create awareness of the structural consequences of food production, i.e., the way food is produced has fundamentally changed, and now has the power to alter the foundations of life as we know it.

² Cultural Logic explains that “people typically rely on analogies in order to learn complex, abstract concepts. These concrete analogies are simplifying models - they help people organize information into a clear picture in their heads, including facts and ideas that they have been exposed to, but never been able to put together in a coherent way.” For more on simplifying models, see the FrameWorks Institute e-zine, Issue No. 19, “Opening Up the Black Box: A Case Study in Simplifying Models” by Axel Aubrun and Joe Grady for Cultural Logic, with Susan Bales of the FrameWorks Institute, available at www.frameworksinstitute.org.

³ For more information on the Simplifying Model tested in the survey, see “Conceptualizing US Food Systems with Simplifying Models: Findings from the TalkBack Testing,” by Cultural Logic, April 2006.

To isolate the effects of each experiment, the sample was carefully constructed to allow for an analysis of the second experiment, in isolation, as well as in combination with the effects of the first experiment. Quotas for gender and region were set for each cell, and oversamples of African American and Hispanic respondents were completed for each cell:

| | | Completed Interviews | | | |
|-------------------|-------------------|----------------------|--------|------------|-------------|
| | | First Experiment | | | |
| | | Control | Legacy | Protection | Reciprocity |
| Second Experiment | Control | 532 | 404 | 393 | 395 |
| | Simplifying Model | 410 | 397 | 379 | 383 |
| | | | | | |

After the various experiments were introduced, survey respondents were asked a series of questions designed to judge each frame's ability to change public attitudes and to move the public toward support for a range of policy goals. This was done by analyzing responses to the following questions:

- Please rate (a series of policies) for whether you favor or oppose the idea.
- How much of a priority should it be to address problems in the food system?
- Which is closer to your view: Regulation of food production is necessary to protect the public interest, OR Regulation of food production will do more harm than good.
- For each of the following (list of actors), please tell me how much responsibility it should have for addressing the problems in the American food system.
- To address the problems in the food system, how much importance should we place on increasing the amount of food produced by local farms?
- Please tell me if the following label would make you more or less likely to buy that food, or if it would make no difference (list of labels).
- For each of the following, please tell me if you are concerned about that issue (list of concerns).

By analyzing the pattern of response to these questions within each experimental version and comparing test responses to a control version that received no experimental reframe, it is possible to begin to determine the impact of each frame on public attitudes.

The effects of each of the experiments are typically subtle, frequently resulting in single-digit shifts in opinion. Dominant models of understanding are developed throughout the course of our lives, and changing those models takes time and significant exposure to new frames. A short survey of this type can provide directional understanding, but will not fully represent the shifts in public opinion that might occur over a long period of exposure to new frames.

The survey analysis is based on telephone interviews with 3,294 adults nationwide, conducted March 21st – April 2, 2006. Each main split or division consists of a national sample of adults drawn proportionate to population. Demographic characteristics (age, education, race, political party identification) were weighted when necessary to be

consistent across splits. Most percentages in this document refer to a base sample size of at least 380 interviews, which results in a sampling error of no more than +/- 5%. (Error decreases as opinion on a question becomes more polarized.) *Unless otherwise noted, only statistically significant differences are included in this report.*

The following analysis begins with a review of current public perceptions, based solely on the responses of the control group (the group uninfluenced by the effects of the framing experiments). An analysis of the effects of each frame and the effects of the experiments on different target audiences follows. Finally, the paper ends with brief observations about the overall implications of this research.

Current Opinion

Note: This section is based upon the response of the Control Group which includes 532 interviews nationwide.

This research confirms many of the focus groups findings. While majorities relate some concerns about the food industry and place some priority on addressing problems in the food system, few feel strongly about this issue. Problematically, survey respondents are more likely to hold individuals responsible for changing the system than any other actor in the public or private sectors. They are willing to use consumer power and are particularly enthusiastic about food grown locally or without the use of pesticides, hormones and antibiotics. As noted in the focus group findings and confirmed here, they are less enthusiastic about “organic” foods, largely due to confusion about the meaning of the term, or the perception of high cost. Fortunately, respondents solidly stand behind food regulations to protect the public, and majorities strongly support a number of policy options to improve the food system.

While majorities express some level of concern about food industry issues, few express extreme concern. Of the issues tested in the survey, respondents are most frequently concerned about food safety: “meat or poultry might be unsafe to eat (70% concerned, 37% extremely concerned), and “unhealthy levels of residues from agricultural pesticides may remain on fruit or vegetables” (61%, 32%). Fewer respondents express concern about farmland being “converted to houses, stores, and other nonagricultural developments” (53%, 24%). (See Table 1)

**Table 1: Food Industry Concerns
Rank Ordered by % Extremely Concerned**

| | Extremely Concerned | Extremely + Very Concerned |
|--|---------------------|----------------------------|
| Meat or poultry might be unsafe to eat | 37% | 70% |
| Unhealthy levels of residues from agricultural pesticides may remain on fruit or vegetables | 32% | 61% |
| Too much farmland in your state may be converted to houses, stores, and other nonagricultural developments | 24% | 53% |

Democrats and older women are especially concerned about all three issues. Otherwise, some groups are more concerned than average about the food safety issues, but not farm development. Those groups particularly concerned about food safety include women, less educated respondents, Independents, and people of color.

Moreover, while most state food system problems should be a priority, few feel strongly about it. Two-thirds believe addressing problems in the food system should be a priority (69% “top” or “high priority”) but only 35% see it as a “top priority.” Interestingly, those who live in urban and rural areas both place more importance on addressing problems in the food system than those who live in suburban areas. As is the case with many attitudes in this survey, those placing the most priority on addressing

problems in the food system include women (particularly older women), Democrats, Independents, less educated voters, and people of color.

Respondents see individuals as most responsible for addressing problems in the food system, but significant percentages identify a role for manufacturers, corporate farms and government as well.

When survey respondents consider who should bear the most responsibility for addressing problems in the American food system, they most frequently point to “individual Americans and their food choices” (61% “a lot of responsibility”). Close to half (48%) states that a lot of responsibility lies with “manufacturers of mass-produced, processed foods.” Significant percentages attribute responsibility to “multinational corporate farms and their food production practices” (42%) and “state and local government policies on regional planning” (40%). The fewest respondents place responsibility with “government policies and laws on farming practices” (35%). (See Table 2)

Table 2: Responsibility for Addressing Problems in the Food System
% “A Lot”

| | |
|---|----|
| Individual Americans and their food choices | 61 |
| Manufacturers of mass-produced, processed foods | 48 |
| Multinational corporate farms and their food production practices | 42 |
| State and local government policies on regional planning | 40 |
| Government policies and laws on farming practices | 35 |

There are no notable demographic differences in the level of responsibility people attribute to individuals. Democrats and Republicans differ in attribution of responsibility, with Democrats placing more responsibility on government actions than Republicans. Women, particularly younger women and college-educated women, are more likely to place responsibility with the public and private sectors, while men, particularly older men and men without a college education, place less responsibility. People of color tend to attribute more responsibility to the public and private sector than white, non-Hispanic respondents, and senior citizens are less likely to attribute responsibility to the public and private sectors than younger respondents.

Survey respondents are predisposed to purchase foods that have been grown locally, and that have been grown without the use of pesticides, hormones, or antibiotics. Fewer are enthusiastic about organic products. Fully 80% of survey respondents report they are more likely to buy food that “had been grown or raised locally” (80% “more likely,” 47% “much more likely”). Similar percentages are more likely to buy food that “had been grown or raised without the use of pesticides, hormones, or antibiotics” (79% “more likely,” 48% “much more likely”). Interestingly, fewer informants express willingness to buy organic food (64% “more likely,” 33% “much more likely”), even though, of course, organic food meets the prior definition of “grown or raised without the use of pesticides, hormones, or antibiotics.” The decline in willingness to purchase between the two questions is consistent with findings from the focus groups, suggesting that people continue to be confused about the definition of “organic” and worried about the cost, even though economic trends cite brisk growth in the organic industry. (See Table 3)

**Table 3: Likeliness to Purchase Product
Rank Ordered by % Much More Likely to Buy**

| | Much More | Much + Somewhat More |
|---|-----------|----------------------|
| A label that said the food had been grown or raised without the use of pesticides, hormones, or antibiotics | 48% | 79% |
| A label that said the food had been grown or raised locally, meaning within your state | 47% | 80% |
| A label that said the food had been grown or raised organically | 33% | 64% |

Those who live in rural areas prioritize buying local food in greater percentages than those who live in urban areas. Women, particularly women without a college degree, are more likely than men, particularly men without a college degree, to want to purchase food grown without pesticides, hormones, or antibiotics. While there is no difference in their response to local products, Democrats are more interested in buying organic food and food grown without pesticides, hormones or antibiotics than Republicans.

In addition to being more enthusiastic about locally grown products, survey participants believe more emphasis should be placed on producing food locally.

Respondents are near unanimous in placing importance on increasing the amount of food produced by local farms (92% important, 56% very important). Those groups placing the most importance on local food production include: Democrats, Hispanic respondents and less-educated respondents, particularly women without a college education.

Survey respondents are committed to the importance of regulating food production.

Nearly three-quarters assert “regulation of food production is necessary to protect the public interest” (72%, 50% strongly), while just one in five side with the opposing statement, “regulation of food production will do more harm than good” (21%, 13% strongly). Democrats, women, especially younger women, and people of color are particularly supportive of regulations while Republicans, men, especially older men, and white, non-Hispanic respondents are less enthusiastic.

Decisive majorities strongly favor a number of policies intended to improve the food production system. The policy favored by the greatest percentage of informants is creating development plans to ensure the availability of farmland (69% strongly favor), followed by school-based efforts to teach children about nutrition (64%) and limit student access to junk food (64%). Majorities also favor policies to protect the environment, such as requiring federally subsidized farmers to protect the environment (62%) or developing training programs to teach farmers to operate environmentally (52%). Many also want to increase the availability of locally grown food, by developing ways for farmers to sell directly to consumers (61%), and changing agriculture subsidies to encourage locally grown food with more revenue for farmers (49%) or lower costs to consumers (48%). Near majorities strongly favor increasing the number of community gardens (49%), changing food stamp policies to allow for the purchase of more fresh foods (47%), and encouraging public institutions to give preference to local and regional

farmers (46%). The least popular policy tested, though still favored by nearly three-quarters and strongly favored by more than one-third, is providing incentives to build supermarkets in urban communities that lack access to healthy food (35%). (See Table 4)

These policies are supported by greater percentages of Democrats and women, particularly older women and college-educated women. There is lower policy support among Republicans and men, especially older men.

Communicators have an opportunity to educate the public on the nation’s food system. People are interested in this topic and are willing to learn more. At the end of the survey, respondents were asked to use one or two words to describe the survey experience. By more than a three to one ratio, respondents describe the survey experience positively. Nearly three-quarters (73%) use positive words such as “interesting” or “informative” (32%), or “good experience” (23%). Only 21% use a negative description such as “too long” (7%) or “too difficult” (6%). This suggests that most people are interested in hearing more about the food system.

| Table 4: Favor Policies | | |
|--|----------------|-------|
| Rank Ordered by % Strongly Favor | | |
| | Strongly Favor | Favor |
| Develop local economic development plans that ensure that enough farmland remains available to produce a significant share of food for the local area | 69% | 89% |
| Expand programs which connect local farms to schools so students learn about fresh food and nutrition | 64% | 91% |
| Require that schools stop selling students junk food or food with limited nutritional value | 64% | 81% |
| Require that any farmer or rancher receiving federal money uses practices to protect the environment | 62% | 87% |
| Increase the percentage of locally grown food that is available in communities, by creating ways for farmers to sell directly to local consumers, such as farmer-operated supermarkets | 61% | 90% |
| Develop training programs to teach farmers and ranchers environmentally-sound ways to operate | 52% | 84% |
| Change the agriculture subsidies so they provide increased revenue for farmers who provide locally grown food | 49% | 82% |
| Increase the number of community gardens in urban areas by providing tax breaks to turn abandoned city lots into thriving gardens that produce food in urban communities | 49% | 81% |
| Shift agriculture subsidies so that, instead of supporting crops for processed foods and animal feed, the subsidies instead result in lower costs for locally grown fresh foods and vegetables | 48% | 78% |
| Change food stamp so they provide enough of an allotment to purchase more fresh foods | 47% | 72% |
| Create incentives for public institutions, such as schools, to give a preference to local and regional farmers when purchasing food | 46% | 81% |
| Some urban communities lack access to healthy, affordable food; in these communities, provide incentives to build supermarkets | 35% | 71% |

Changing the Conversation

The objective of this research is to develop a communications strategy that will lead to increased public support for a range of policies which experts say would significantly address problems in the food production system. Based on the results of the qualitative research phase, the FrameWorks Institute research team developed three values-based reframes that demonstrated promise:

- **The Legacy Frame** communicates the consequences of current food production choices for future generations and the long-term viability of the food system.
- **The Protection Frame** highlights the dangers of current food production choices and the actions needed to protect the public.
- **The Reciprocity Frame** features the status of local communities and the interdependence between rural communities and the rest of the nation.

In addition, the survey tested the influence of a simplifying model for the food system:

- **The Runaway Food System** is intended to create awareness of the structural consequences of food production, i.e., the way food is produced has fundamentally changed, and now has the power to alter the foundations of life as we know it.

Survey participants were randomly assigned to one of eight groups (a control group that received no deliberate framing, a group testing the model in isolation, and six groups testing the values-based reframes with and without the simplifying model). Each group was exposed to a different survey version designed to trigger distinct ways of thinking about the food system which might be assumed to affect public attitudes about the food system and support for a number of policies. The results of the experiments are reported below.

The Simplifying Model

Note: This section is based upon the response of those exposed to the Simplifying Model which includes 410 interviews nationwide.

As noted in the Method section of this report, the Runaway Food System simplifying model was included in the experiment in two different ways. First, some survey informants were exposed only to the simplifying model before responding to the key issue indicator questions. Other survey informants heard both the simplifying model and a values-based reframe before responding to the key indicator questions. By comparing these responses to a control group and to a group of survey participants who heard the values reframe without a simplifying model, it is possible to determine the additional influence of the simplifying model.

Response to Test Language

To expose survey respondents to the Runaway Food System simplifying model, the model was embedded into a question concerning awareness of the issue. As expected, few report much knowledge of this concept: 15% say they have heard “a lot” about the Runaway Food System concept, 19% have heard “some,” 22% have heard “a little,” and a plurality (44%) have heard “nothing.” (See Table 5)

Table 5: Test Language for Runaway Food System Simplifying Model

Experts are increasingly concerned about what they call our Runaway Food System. The way we produce food today has fundamentally changed, and now has the power to alter the foundations of life as we know it, almost inadvertently. Some experts are particularly concerned about farming chemicals like pesticides and weed-killer that are permanently altering our soil and water. Others focus on genetic engineering that is changing the nature of the plants and animals we eat. And still others are most concerned about mile-long fishing nets that drag along the ocean floor and alter ecosystems. All these experts warn that, until we get our runaway food system under control, it will do more damage to the foundations we depend on. How much have you heard about this Runaway Food System concept – a lot, some, a little, or nothing?

15% have heard “a lot” about this concept

Effect of the Frame

The Runaway Food System simplifying model was tested in isolation, as well as in combination with each of the three values-based frames. This section presents the effect of the model in isolation, while subsequent sections include discussions of the model effects in combination with each of the values frames. In short, the model is far more effective when presented in combination with a values-based frame than when presented in isolation. In isolation, the influence of the model as measured by this survey, is limited.

The Runaway Food System model makes slight gains in policy support. When survey respondents are exposed to the Runaway Food System model without any of the values-based framing, it results in significant improvement in overall average support for the twelve-question policy battery. However, while average policy support for the battery improves, this improvement is based on significant movement for only three of the twelve policies. (See Table 6)

**Table 6: Increase in Percent Saying “Strongly Support Policy”
Compared to Control Group**

| | Model Compared to Control |
|---|---------------------------------|
| Develop training programs to teach farmers and ranchers environmentally-sound ways to operate | +11 points |
| Create incentives for public institutions, such as schools, to give a preference to local and regional farmers when purchasing food | +9 points |
| Change food stamps so they provide enough of an allotment to purchase more fresh foods | +4 points |

The model significantly alters survey respondents' attribution of responsibility for fixing problems in the food system. When exposed to the model, survey respondents place increased responsibility on “government policies and laws on farming practices” (+11 points “a lot of responsibility”) and on “multinational corporate farms and their food production practices” (+9 points). There are no significant shifts in responsibility for “individual Americans and their food choices,” “manufacturers of mass-produced, processed foods,” or “state and local government policies on regional planning.”

The model also influences consumer choices. Those exposed to the model report increased interest in purchasing food that “had been grown or raised without the use of pesticides, hormones, or antibiotics” (+10 points “much more likely to buy”), and food that “had been grown or raised organically” (+7 points). It does not significantly change survey respondents' willingness to purchase food that “had been grown or raised locally.”

At the same time, the model in isolation fails to increase concern for consequences, priority of the problem, or the importance of local food production or government regulation. The model does not change survey respondents' level of concern for any of the three consequences investigated in the survey: urban sprawl, meat safety, and pesticide residue. Furthermore, it does not lead respondents to elevate the priority of addressing problems in the food system. Finally, the model leads to no increased importance ratings for local food production or regulating food production.

When presented in isolation, the model has a beneficial effect primarily among women, less-educated respondents, those who live in the suburbs, and Democrats.

The Legacy Frame

Note: This section is based upon the response of those exposed to the Legacy Frame, which includes 801 interviews nationwide. Half the respondents heard the Runaway Food System model (397), while half did not (404).

Response to Test Language

The Legacy Frame was embedded in questions at the beginning of the survey, using language designed to cause survey respondents to think about the influence of current food production choices on future generations and the long-term viability of the food system. The questions are simply a tool to expose survey respondents to the Legacy Frame; the actual responses to these questions are typically unimportant. Still, responses to the questions are reviewed in this section to communicate any insights that may be provided. (See Table 7 for actual test language.)

Survey respondents agree that a number of approaches are needed to ensure the long-term viability of the food system. More than eight in 10 suggest “incentives to support more local farms” are needed, three-quarters say “tighter restrictions on the use

of pesticides and hormones” are needed, and two-thirds believe rules are needed “to stop overly intensive farming practices that wear out the nutrients in farm soil.” Note in the Table below that responses to these questions are nearly identical, whether participants are responding to the Legacy version of the survey with the simplifying model or without. Since the questions about needed approaches occur before the model had been introduced, we would expect survey responses to these early questions to be consistent across versions.

Few report hearing much of anything about the Runaway Food System concept. By the fourth question in the survey, half of those responding to the Legacy version of the survey were exposed to a statement including the Runaway Food System simplifying model. Only 14% say they had “heard a lot” about this concept, while an additional 26% had heard “some” about the idea.

With more information, half voice concerns about the nation’s food production system, and the long-term health, economic, and environmental consequences of the system. After hearing a statement with information about the problems in the food system and the long-term consequences of short-term production choices, half of survey respondents report they are “extremely” or “very concerned” about the food production system. Majorities are concerned about the environmental and economic consequences, while roughly half are concerned about the health consequences. There are slight differences in response between those who heard the model and those who did not. Those who heard the model are slightly less concerned about the food production system and its consequences, except for the economic consequences.

Addressing problems in the food system becomes a priority for three-quarters of survey respondents. To help survey respondents understand that effective solutions exist, the survey included a statement explaining solutions occurring around the country. After hearing this statement, three-quarters assert addressing problems in the food system should be a “top” or “high priority,” with one-third saying it should be a “top priority.” Those who heard the Runaway Food System model rate addressing problems in the food system a slightly lower priority than those who were not exposed to the model.

Respondents place equal weight on the health, environmental, and economic reasons to address problems in the food system. Overall, roughly equal percentages of respondents rate health, environment and economic rationales as important. When exposed to the Legacy Frame in isolation, more survey respondents say health is the most important reason for addressing the food system, while those who also heard the simplifying model are slightly more likely to choose the environment. Of three concerns about the Runaway Food System, a plurality of respondents say they have the most concern that “farming chemicals are permanently altering our soil and water.”

Table 7: Test Language for Legacy Frame

| | Legacy Alone | Legacy/ Model |
|--|--------------------------------------|--------------------------------------|
| Action Needed for Long-Term Viability: | | |
| Tighter restrictions on the use of pesticides and hormones, since they can build up in the food chain and affect future generations. | 75% “needed” | 75% “needed” |
| Rules to stop overly intensive farming practices that wear out the nutrients in farm soil, since that erodes our ability to produce food in the years to come. | 65% “needed” | 65% “needed” |
| Incentives to support more local farms, making it possible in the future for more food to be produced and eaten locally. | 80% “needed” | 83% “needed” |
| Model Exposure: Experts are increasingly concerned about what they call our Runaway Food System... | NA | 14% “heard a lot” |
| Concern after Statement Exposure: | | |
| We expect our food system to produce what we need now and for generations to come, but it is becoming increasingly clear that decisions are being made in food production that will affect the food system far into the future. Experts say that the pesticides and hormones that are used in growing food, and the distance that food travels, have long-term consequences on the food system’s viability. Some experts are particularly concerned about... | 53% “ext.” or “very concerned” | 46% “ext.” or “very concerned” |
| Concern about Consequences | | |
| The long-term health consequences, meaning that fresh fruits and vegetables lose much of their nutritional value over time...the amount of nutrition in our diet has been shrinking... | 53% “ext.” or “very concerned” | 46% “ext.” or “very concerned” |
| The long-term economic consequences, meaning that when we rely upon multinational corporate farms to produce our food, it harms the long-term viability of farm economies in rural America. | 59% “ext.” or “very concerned” | 63% “ext.” or “very concerned” |
| The long-term environmental consequences, meaning that transporting food long distances wastes enormous amounts of energy, and pollutes and degrades the environment we leave for future generations. | 58% “ext.” or “very concerned” | 54% “ext.” or “very concerned” |
| Issue Priority After Statement Exposure | | |
| There are lots of things that we can do today [to fix the food system/to get control of the runaway food system] and turn it into a system that provides healthy food while protecting the environment and rural economies now and into the future. In fact, several cities and states are already acting... | 38% “top priority” | 31% “top priority” |
| Most important reason to address problems in the food system | | |
| To ensure health benefits for the long term, since local fresh food retains more of its nutrition | 31% | 23% |
| To leave our environment in good shape for future generations, since local food doesn’t waste a lot of energy and pollute the air with long-distance transportation | 25% | 29% |
| To strengthen rural economies, so that communities can maintain an ability to produce more of their own food for the long term | 25% | 24% |
| Concerns about ways the Runaway Food System is altering foundations of life | | |
| That farming chemicals are permanently altering our soil and water. | NA | 43% |
| That genetic engineering is changing the nature of the plants and animals we eat. | NA | 23% |
| That mile-long fishing nets are dragging along the ocean floor and altering ecosystems. | NA | 15% |

Effect of the Frame

The Legacy Frame is exceedingly effective in shaping public understanding of the problems facing the food system and in building public support for needed changes. While all three experimental values frames advance the conversation, the Legacy Frame shows the greatest promise. It has the most consistently beneficial effect on opinion overall, and it lifts opinion among the greatest number of demographic subgroups. In most instances, the Legacy Frame results in more significant movement when combined with the Runaway Food System model than when it stands alone.

The Legacy Frame generates support for a wide range of policies to improve the food system. With and without the model, the Legacy Frame results in statistically significant improvement in overall average support for the twelve-question policy battery. Survey respondents give significantly higher ratings for 10 of the policies. (See Table 8)

Table 8: Increase in Percent Saying “Strongly Support Policy” Compared to Control Group

| | Legacy Compared to Control | Legacy/Model Compared to Control |
|---|----------------------------|----------------------------------|
| Require that any farmer or rancher receiving federal money uses practices to protect the environment | | +8 points |
| Develop training programs to teach farmers and ranchers environmentally-sound ways to operate | +17 points | +14 points |
| Change the agriculture subsidies so they provide increased revenue for farmers who provide locally grown food | +13 points | +13 points |
| Increase the percentage of locally grown food that is available in communities, by creating ways for farmers to sell directly to local consumers, such as farmer-operated supermarkets | +10 points | +9 points |
| Require that schools stop selling students junk food or food with limited nutritional value | +8 points | |
| Create incentives for public institutions, such as schools, to give a preference to local and regional farmers when purchasing food | +17 points | +14 points |
| Increase the number of community gardens in urban areas by providing tax breaks to turn abandoned city lots into thriving gardens that produce food in urban communities | +15 points | +9 points |
| Some urban communities lack access to healthy, affordable food; in these communities, provide incentives to build supermarkets | +10 points | +6 points |
| Change food stamps so they provide enough of an allotment to purchase more fresh foods | +12 points | +11 points |
| Shift agriculture subsidies so that instead of supporting crops for processed foods and animal feed, the subsidies instead result in lower costs for locally grown fresh foods and vegetables | +6 points | +7 points |
| Expand programs which connect local farms to schools, so students learn about fresh food and nutrition | +12 points | +9 points |

The Frame increases concern about the consequences of food production, and causes survey respondents to place higher priority on addressing problems in the system. With and without the model, the Legacy Frame increases concern over “unhealthy levels of residues from agricultural pesticides [that] may remain on fruit or vegetables” (+10 points “extremely” or “very” concerned Legacy; +9 points Legacy/Model). In addition, the Legacy Frame (alone) results in increased concern that “too much farmland in your state may be converted to houses, stores, and other nonagricultural developments” (+7 points). There is no significant change in concern about meat safety.

After being exposed to the Legacy Frame, survey respondents increasingly prioritize addressing problems in the food system (+13 points “top” or “high” priority among those exposed to Legacy alone; +10 points among those exposed to Legacy/Model). In addition, they increasingly point to local farm production as an important solution (+8 points “very important” Legacy alone). When the model is added to the Legacy Frame, there is no statistically significant shift in the importance of local food production.

This frame, particularly when combined with the model, causes survey respondents to place more responsibility for fixing problems on the public and private sectors. The Legacy Frame alone results in increased attribution of responsibility for three of five actors in the food system: “state and local government policies on regional planning” (+13 points “a lot of responsibility”), “government policies and laws on farming practices” (+12 points), and “multinational corporate farms and their food production practices” (+13 points).

In comparison, the addition of the model results in increased attribution of responsibility for *four* of five actors, with two actors receiving significantly higher ratings than in response to the Legacy Frame alone: “Manufacturers of mass-produced, processed foods” (+11 points “a lot of responsibility” compared to the control; +5 points compared to Legacy alone), “state and local government policies and regional planning” (+9 points), “government policies and laws on farming practices” (+16 points; +4 points over Legacy alone), and “multinational corporate farms and their food production practices” (+13 points).

Survey respondents are no more likely to place responsibility on “individual Americans and their food choices” when exposed to the Legacy Frame with or without the model. This is an important consequence of the Frame, since it demonstrates that survey respondents understand the changes in the system are ones that individuals cannot make alone.

Finally, though it increases respondents’ assessment of the role of the public sector, the Legacy Frame does not result in a statistically significant increase in survey respondents’ ratings of the importance of regulating food production.

Survey respondents report changes in their planned purchase patterns, particularly when the Legacy Frame is combined with the Runaway Food System model. Survey

respondents say they are increasingly likely to buy food that has been: “grown or raised locally, meaning within your state” (+11 points Legacy alone; +7 points Legacy/Model), “grown or raised without the use of pesticides, hormones, or antibiotics” (+9 points Legacy; +12 points Legacy/Model), and “grown or raised organically” (+9 points Legacy/Model).

The Legacy Frame is effective with virtually every demographic group. A wide range of demographic groups is influenced by the Legacy Frame. In addition, when the frame is combined with the model, it helps to solidify support among college-educated respondents, men, engaged citizens, Republicans, and those who live in the suburbs.

The Protection Frame

Note: This section is based upon the response of those exposed to the Protection Frame, which includes 772 interviews nationwide. Half the respondents heard the Runaway Food System model (379), while half did not (393).

Response to Test Language

The Protection Frame was designed to cause survey respondents to think about the dangers of current food production choices and the actions needed to protect the public. The questions are used to expose survey respondents to the Protection Frame; the actual responses to these questions are typically unimportant. Still, responses to the questions are reviewed in this section to communicate any insights that may be provided. (See Table 9 for actual test language.)

Survey respondents support approaches to protect the public from problems in the food system. More than eight in 10 suggest “incentives to support more local farms” and “rules to limit or eliminate certain kinds of pesticides” are needed to protect the public, and seven in ten believe rules are needed “to limit or eliminate the amount of growth hormones that are used to quickly bulk up beef and chicken.” Note in Table 9 below that responses to these questions are nearly identical whether participants are responding to the Protection version of the survey, with the model or without. This is as we would expect, since the model had not been introduced by this point in the survey.

The Runaway Food System concept is a new idea for most research informants. By the fourth question in the survey, half of those responding to the Legacy version of the survey were read a statement including the Runaway Food System simplifying model. Only 16% say they had “heard a lot” about this concept, while an additional 22% had heard “some” about the idea.

A majority is concerned about the food production system generally. Two-thirds are concerned about the economic consequences of the system, and a majority is concerned about the health and environmental consequences. After hearing a

statement about the dangers in the food system and the health and environmental consequences of decisions in the current food system, a majority of survey respondents are “extremely” or “very” concerned about the nation’s food production system. Nearly two-thirds are concerned about the economic consequences, and strong majorities are concerned about the health and environmental consequences. There are few differences in response between those who heard the model and those who did not.

More than three-quarters prioritize addressing problems in the food system. After hearing a description of food system solutions that exist in different states and localities, more than three-quarters believe addressing problems in the food system should be a “top” or “high priority,” with one-third suggesting it should be a “top priority.”

The Protection Frame causes respondents to emphasize the health-related reasons to address problems in the food system, rather than the environmental and economic reasons. A plurality of those exposed to the Protection Frame say health is the most important reason for fixing the food system, and far fewer choose economic or environmental reasons. Of three concerns about the Runaway Food System, a plurality of respondents say they have the most concern that “farming chemicals are permanently altering our soil and water.”

Table 9: Test Language for Protection Frame

| | Protection Alone | Protection/Model |
|--|--------------------------------------|--------------------------------------|
| Action Needed to Protect the Public | | |
| Rules to limit or eliminate the amount of growth hormones that are used to quickly bulk up beef and chicken, since growth hormones may create health problems. | 72% “needed” | 70% “needed” |
| Rules to limit or eliminate certain kinds of pesticides used in the production of fruits and vegetables, since they can lead to developmental and health problems in children. | 85% “needed” | 81% “needed” |
| Incentives to support more local farms, so that more money stays in local communities and more small and mid-size farmers can stay in business. | 84% “needed” | 83% “needed” |
| Model Exposure: Experts are increasingly concerned about what they call our Runaway Food System... | NA | 16% heard “a lot” |
| Concern after Statement Exposure | | |
| We expect our food system to be dependable and trustworthy, but it is becoming increasingly clear that decisions are being made in food production that affect us all, and some experts are beginning to call for changes to protect us. For example... | 58% “ext.” or “very concerned” | 57% “ext.” or “very concerned” |
| Concern About Consequences | | |
| The health consequences, meaning that fresh fruits and vegetables lose much of their nutritional value over time. So we think we are getting healthy food, when the reality is that food doesn’t have as many health benefits, because it has been traveling for days and weeks. | 60% “ext.” or “very concerned” | 58% “ext.” or “very concerned” |
| The economic consequences, meaning that when we rely upon multi-national corporate farms to produce our food, it weakens farm economies in rural America and limits the availability of fresh, local foods. | 64% “ext.” or “very concerned” | 63% “ext.” or “very concerned” |
| The environmental consequences -- farms can be a strong steward of the environment; instead, many agriculture industry practices actually harm the environment. For example, transporting food long distances wastes energy and pollutes our environment. | 61% “ext.” or “very concerned” | 56% “ext.” or “very concerned” |

| Issue Priority After Statement Exposure | | |
|---|--------------------|--------------------|
| There are lots of things that we can do today to [fix the food system/get control of the runaway food system] and turn it into a system that provides healthy food while protecting the environment and rural economies. In fact, several cities and states are already acting... | 35% “top priority” | 31% “top priority” |
| Most important reason to address problems in the food system | | |
| To protect our health, since local fresh food retains more of its nutrition | 48% | 41% |
| To guard our environment, since local food doesn’t waste a lot of energy and pollute the air with long-distance transportation | 13% | 18% |
| To preserve rural economies and keep more small and mid-size farmers in business | 22% | 23% |
| Concerns about ways the Runaway Food System is altering the foundations of life | | |
| That farming chemicals are permanently altering our soil and water. | NA | 35% |
| That genetic engineering is changing the nature of the plants and animals we eat. | NA | 25% |
| That mile-long fishing nets are dragging along the ocean floor and altering ecosystems. | NA | 14% |

Effect of the Frame

The Protection Frame is enormously successful in advancing public understanding of the issues facing the food production system. This Frame has more influence on policy support when it is presented without the model. However, when the model is included in the conversation, there are a number of other beneficial consequences: survey respondents place more importance on addressing problems in the food system, want more emphasis on local food production, attribute more responsibility to the public and private sectors, and are more willing to alter their buying patterns.

The Protection Frame significantly increases support for a number of policies. The Protection Frame significantly increases average policy support compared to the control group. The overall average rating for the twelve-question policy battery increases, whether the Protection Frame is presented with or without the Runaway Food System model. However, support increases for a greater number of policies when the Runaway Food System model is omitted. The Protection Frame alone, without the Runaway Food System model, causes survey respondents to significantly increase ratings for eight policies. When the model is added to the Protection Frame, respondent support significantly increases for just four policies. (See Table 10)

**Table 10: Increase in Percent Saying “Strongly Support Policy”
Compared to Control Group**

| | Protection Compared to Control | Protection/ Model Compared to Control |
|---|--------------------------------------|---|
| Develop training programs to teach farmers and ranchers environmentally-sound ways to operate | +11 points | +11 points |
| Change the agriculture subsidies so they provide increased revenue for farmers who provide locally grown food | +14 points | +9 points |
| Increase the percentage of locally grown food that is available in communities, by creating ways for farmers to sell directly to local consumers, such as farmer-operated supermarkets | +11 points | |
| Create incentives for public institutions, such as schools, to give a preference to local and regional farmers when purchasing food | +22 points | +10 points |
| Increase the number of community gardens in urban areas by providing tax breaks to turn abandoned city lots into thriving gardens that produce food in urban communities | +11 points | |
| Some urban communities lack access to healthy, affordable food; in these communities, provide incentives to build supermarkets | +8 points | |
| Change food stamps so they provide enough of an allotment to purchase more fresh foods | +11 points | |
| Shift agriculture subsidies, so that, instead of supporting crops for processed foods and animal feed, the subsidies result in lower costs for locally grown fresh foods and vegetables | +9 points | +7 points |

The Protection Frame influences survey respondents’ attribution of responsibility for addressing the problem, particularly when combined with the model. Whether or not the model is embedded in the Protection Frame, survey respondents increasingly place responsibility upon “multinational corporate farms and their food production practices” (+11 points “a lot of responsibility” Protection alone; +15 points Protection/Model), and upon “state and local government policies on regional planning” (+9 points Protection alone; +12 points Protection/Model). In addition, frame/model combination results in one additional shift in responsibility that the frame alone does not affect: “government policies and laws on farming practices” (+16 points Protection/Model). This frame does not increase survey respondents’ ratings of responsibility for “individual Americans and their food choices” or “manufacturers of mass-produced, processed foods.”

The Runaway Food System model bolsters the Protection Frame’s influence on consumer behavior, the perceived importance of local food production and the priority of addressing problems in the food system. When the Protection Frame and the simplifying model are combined, survey respondents place more importance on increasing the amount of food produced by local farms (+10 points “very important”). In addition, survey respondents say they are increasingly likely to buy foods that are: “grown or raised organically (+4 points “much more likely to buy”), “grown or raised without the use of pesticides, hormones, or antibiotics” (+9 points), and “grown or raised locally, meaning within your state” (+11 points). In contrast, when the model is omitted, there is no change in the importance of local food production, and only one of the three

types of food production receives increased purchase ratings: “grown or raised locally, meaning within your state” (+13 points “much more likely to buy”).

Moreover, when the Protection Frame and the simplifying model are combined, survey respondents become significantly more likely to prioritize addressing problems in the food system (+11 percentage points “top” or “high” priority), but there is no significant increase when the Protection Frame is presented in isolation.

Interestingly, attitudes toward regulation do not change significantly, and the Protection Frame has only a modest influence on safety concerns. This Frame does not have a statistically significant effect on survey respondents’ assessment of the importance of regulating food production, with or without the model. In addition, concern over urban sprawl and meat safety do not change; however survey respondents exposed to the Protection Frame alone become increasingly concerned about residues from agricultural pesticides (+9 points “extremely” or “very” concerned).

The Protection Frame has an influence among many demographic groups. The Protection Frame creates beneficial shifts among a wide array of survey respondents, but particularly among: women (especially older women), Democrats, less-educated respondents (especially men without a college education), and respondents who live in urban areas. When the model is combined with the Protection Frame, some additional groups are moved by the frame: younger women, women without a college education, those who live in the suburbs, and Republicans.

The Reciprocity Frame

Note: This section is based upon the response of those exposed to the Reciprocity Frame, which includes 778 interviews nationwide. Half the respondents heard the Runaway Food System model (383), while half did not (395).

Response to Test Language

The objective of the Reciprocity Frame is to help survey respondents think about the status of local communities and the interdependence between rural communities and the rest of the nation. The questions are simply used to expose survey respondents to the Reciprocity Frame; the actual responses to these questions are frequently unimportant. Still, responses to the questions are reviewed in this section, to communicate any insights that may be provided. (See Table 11 for actual test language.)

Survey respondents assert that a number of approaches are needed to ensure that communities can produce food locally. To ensure that communities can produce local food, more than eight in ten suggest that “incentives to support more local farms” are needed, three-quarters say “regional planning strategies” are needed, and seven in ten

believe rules are needed “to limit or eliminate certain kinds of farm chemicals.” Note in Table 11 below that responses to two of the three questions are similar whether or not participants heard the model, but the response to one of the questions is significantly different. While demographics are similar across both versions of the survey, this difference in response *before* the introduction of the model should provide a caution that lower ratings in the Reciprocity version with the model may be due in part to sampling differences, and not just the influence of the survey experiments.

As expected, the Runaway Food System concept is unfamiliar to most informants.

By the fourth question in the survey, half of those responding to the Reciprocity version of the survey were exposed to a statement including the Runaway Food System simplifying model. Only 14% say they had “heard a lot” about this concept, while an additional 20% had heard “some” about the idea.

Respondents voice concerns about the food production system and its consequences.

After hearing a statement with information about the relationship between communities and local food production, a majority of survey respondents exposed to the Reciprocity version are “extremely” or “very” concerned about the food production system; in contrast, significantly fewer (43%) are concerned among those also exposed to the Runaway Food System model. Of those who heard the combined Reciprocity/Model version, a majority are concerned about the economic, health and environmental consequences. Concern increases to two-thirds of those exposed to the Reciprocity Frame in isolation. *As noted earlier, the lower levels of concern among informants exposed to the simplifying model may be due in part to sampling differences, since lower levels of concern emerged before the introduction of the model.*

After hearing examples of effective solutions, informants prioritize fixing the food system. Of those who heard the Reciprocity Frame in isolation, more than three-quarters say addressing problems in the food system should be a “top” or “high priority,” with one-third saying it should be a “top priority.” In contrast, two-thirds of those who heard the combined Reciprocity/Model version say it should be a priority.

Health is the top reason for acting, according to those exposed to the Reciprocity Frame. Health, environment and the economy are equally important, according to those who also heard the simplifying model. Those exposed to the Reciprocity Frame in isolation profess that health is the most important reason for addressing the food system, while those hearing the combined Reciprocity/Model version place equal weight on the health, environmental and economic reasons. Of three concerns about the Runaway Food System, a plurality of respondents say they have the most concern that “farming chemicals are permanently altering our soil and water.”

Table 11: Test Language for Reciprocity Frame

| | Reciprocity Alone | Reciprocity/ Model |
|---|--------------------------------------|--------------------------------------|
| Action Needed to Ensure Communities Can Produce Food | | |
| Rules to limit or eliminate certain kinds of farm chemicals, since they can pollute air and waterways throughout surrounding communities. | 72% “needed” | 68% “needed” |
| Regional planning strategies that keep major economic development to those areas with existing roads and services, and protect rural areas and farms from further urban sprawl. | 81% “needed” | 71% “needed” |
| Incentives to support more local farms, so that states and regions have more say over their food supply, and more small and mid size-farmers can stay in business. | 84% “needed” | 80% “needed” |
| Model Exposure: Experts are increasingly concerned about what they call our Runaway Food System... | NA | 14% heard “a lot” |
| Concern After Statement Exposure | | |
| We expect our food system to produce what we all need, regardless of where we live, but it is becoming increasingly clear that decisions are being made in food production that will keep shifting control and planning away from local communities, affecting us all. Some experts are particularly concerned about... | 56% “ext.” or “very concerned” | 43% “ext.” or “very concerned” |
| Concern About Consequences | | |
| The health consequences, meaning that fresh fruits and vegetables lose much of their nutritional value over time. Food that is grown outside the local area, that has been traveling for days and weeks, has less nutritional value. | 66% “ext.” or “very concerned” | 54% “ext.” or “very concerned” |
| The economic consequences, meaning that when we rely upon multinational corporate farms to produce our food and ship it around the world, it weakens farm economies in rural America and undermines our ability to produce our own food | 68% “ext.” or “very concerned” | 56% “ext.” or “very concerned” |
| The environmental consequences, meaning that transporting food long distances wastes energy, and pollutes and degrades the environment in all of our communities. | 63% “ext.” or “very concerned” | 56% “ext.” or “very concerned” |
| Issue Priority After Statement Exposure | | |
| There are lots of things that we can do today to get control of the [runaway] food system and turn it into a system that provides healthy food to local communities, while protecting the environment and rural economies. In fact, several cities and states are already acting... | 34% “top priority” | 28% “top priority” |
| Most important reason to address problems in the food system | | |
| To improve a community’s health, since local fresh food retains more of its nutrition | 36% | 29% |
| To preserve a community’s environment, since local food doesn’t waste a lot of energy and pollute the air with long-distance transportation | 17% | 27% |
| To give back to rural economies, since money spent by a community goes to support farmers in its own community, and we need healthy rural communities for a strong country | 26% | 26% |
| Concerns About Ways the Runaway Food System is altering foundations of life | | |
| That farming chemicals are permanently altering our soil and water. | NA | 36% |
| That genetic engineering is changing the nature of the plants and animals we eat. | NA | 23% |
| That mile-long fishing nets are dragging along the ocean floor and altering ecosystems. | NA | 17% |

Effect of the Frame

The Reciprocity Frame makes modest advances in public understanding and support, but it also has a number of failings. It increases support for policies, though not as many policies as the other test frames. The Frame causes respondents to see more government and business responsibility for food production practices, while it also increased respondents' willingness to change personal consumer behaviors. However, the Frame fails to affect respondents' priority ratings for fixing the food system, their perception of the importance of local food production, or attitudes toward regulation.

The Reciprocity Frame advances public support for policy, but it builds support for fewer policies when combined with the Runaway Food System model. With and without the model, the Reciprocity Frame results in statistically significant improvement in overall average support for the twelve-question policy battery. Survey respondents give significantly higher ratings to six of the policies when the Reciprocity Frame is presented alone, and four of the policies when it is combined with the model. (See Table 12)

**Table 12: Increase in Percent Saying “Strongly Support Policy”
Compared to Control Group**

| | Reciprocity Compared to Control | Recip./Model Compared to Control |
|---|---------------------------------------|--|
| Develop training programs to teach farmers and ranchers environmentally-sound ways to operate | +12 points | +10 points |
| Create incentives for public institutions, such as schools, to give a preference to local and regional farmers when purchasing food | +16 points | +13 points |
| Increase the number of community gardens in urban areas by providing tax breaks to turn abandoned city lots into thriving gardens that produce food in urban communities | +11 points | |
| Some urban communities lack access to healthy, affordable food; in these communities, provide incentives to build supermarkets | +7 points | |
| Change food stamps so they provide enough of an allotment to purchase more fresh foods | +10 points | +8 points |
| Shift agriculture subsidies so that instead of supporting crops for processed foods and animal feed, the subsidies instead result in lower costs for locally grown fresh foods and vegetables | +6 points | +6 points |

The Reciprocity Frame makes some gains in attributing responsibility to government and corporate farms. This frame causes survey respondents to place more responsibility on “state and local government policies on regional planning” (+7 points Reciprocity, +10 points Reciprocity/Model). When combined with the model, respondents place more responsibility on “multinational corporate farms and their food production practices” (+11 points). However, with or without the model, the Reciprocity Frame does not change survey respondents' attribution of responsibility toward

individual Americans, manufacturers of processed foods, or government policies on farming practices.

The Frame also makes modest advances in changing respondent’s perceived future consumer behavior. Survey participants say they are more likely to change their purchasing patterns to buy food that has been “grown or raised locally, meaning within your state” (+12 points “much more likely to buy” Reciprocity; +11 points Reciprocity/Model). Those exposed to the Reciprocity Frame alone are also more likely to purchase food that has been “grown or raised without the use of pesticides, hormones, or antibiotics” (+14 points Reciprocity). Whether or not the frame is combined with the model, survey respondents are no more likely to buy food that has been “grown or raised organically.”

Concern about food production practices increases, but only when the Reciprocity Frame is presented in isolation, without the model. The Reciprocity Frame results in increased concern that “unhealthy levels of residues from agricultural pesticides may remain on fruit or vegetables” (+9 points “extremely” or “very” concerned), and “too much farmland in your state may be converted to houses, stores, and other nonagricultural developments” (+5 points). There is no increased concern about meat safety. Importantly, the elevated concern only occurs when survey respondents are exposed to the Reciprocity Frame without the Runaway Food System model.

Finally, this frame has a number of failings. It does not affect priority ratings, the perceived importance of local food production, or attitudes toward regulation. The Reciprocity Frame does not increase survey respondents’ priority for addressing problems in the food system, nor does it cause respondents to place additional importance on increasing local food production. When presented alone, the Reciprocity Frame does not change survey respondents’ assessment of the necessity of regulation of food production. However, when the Reciprocity Frame is combined with the model, there is a detrimental effect on respondents’ attitudes toward regulation. They become increasingly likely to believe that “regulation of food production will do more harm than good” (+7 points, +6 points strongly).

Demographically, the Frame has less impact than the other tested frames. The Reciprocity Frame shifts opinion among fewer groups than the other frames, but most consistently among: Democrats, women, and less-educated respondents.

Conclusions

With more strategic framing, communicators have an incredible opportunity to shape public debate on the issues facing the food production system. All three experimental reframes and the simplifying model have a beneficial influence on public understanding of the issue and support for policies.

The Legacy Frame has the most consistent positive influence on public attitudes and policy support. It results in increased support for more policies than the other two experimental frames, and it results in positive shifts for more attitudinal questions than the other two frames. In addition, it creates statistically significant shifts among a wide array of demographic groups – more than the other experimental frames.

The Legacy Frame works well in combination with the Runaway Food System model. While the model in isolation has limited influence, when combined with the Legacy Frame the model has a positive effect, particularly in attributing responsibility to the public and private sectors.

About the Author

Meg Bostrom, President of Public Knowledge LLC, is a frequent FrameWorks collaborator and a veteran communications strategist with a unique perspective resulting from her experiences as communicator, opinion analyst, advertising executive, and political consultant. Meg started her career as a political pollster, consulting for nonprofit groups, political candidates, foundations, and national associations. She then served as Executive Vice President of Strategic Planning at the advertising agency Trahan, Burden and Charles, where she was responsible for determining communications strategy for corporate and non-profit clients. Meg founded Public Knowledge to serve as a bridge between public opinion research and communications strategy. Public Knowledge uses public opinion data to develop communications strategy that will advance public understanding of, and support for, public policies to address social issues, including the environment, children, foreign policy, healthcare, and the working poor. A Chicago native, she received her bachelor's degree from the University of Illinois, and holds a master's degree from the University of Connecticut.

Appendix: Frequency Questionnaire

Priming Survey
Field dates, March 21 – April 2, 2006

| | |
|-------------------|-----|
| Version | |
| Control | 532 |
| Control/Model | 410 |
| Protection | 393 |
| Protection/Model | 379 |
| Legacy | 404 |
| Legacy/Model | 397 |
| Reciprocity | 395 |
| Reciprocity/Model | 383 |

Hello, I am calling for National Opinion Survey. I would like to ask you a few questions facing our nation, state and local community. I am not selling anything and your responses will remain anonymous. The interview will last approximately 15 minutes. Since this is a scientific study, we need a balance of men and women, may I speak to the youngest man 18 years or older who is at home right now?

(INTERVIEWER: If youngest man 18+ is not home, ask to speak to youngest female 18+ who is at home right now.)

RECORD RESPONDENT'S GENDER (DO NOT ASK).

| | |
|--------|----|
| Male | 49 |
| Female | 51 |

Version P (n=393) and PM (n=379)

Recently there has been quite a lot of news coverage concerning the consequences of how we grow food. Some experts suggest that new approaches are needed to protect the public from unsafe practices. For each of the following, please tell me whether or not you think that approach is needed to protect the public:

| | Needed | | Not Needed | | Don't Know | |
|--|------------------|------------------|------------------|------------------|------------------|------------------|
| | Protection Alone | Protection/Model | Protection Alone | Protection/Model | Protection Alone | Protection/Model |
| 1. Rules to limit or eliminate the amount of growth hormones that are used to quickly bulk up beef and chicken, since growth hormones may create health problems. Is that action needed to protect the public or is it not needed? | 72 | 70 | 21 | 23 | 7 | 7 |
| 2. Rules to limit or eliminate certain kinds of pesticides used in the production of fruits and vegetables, since they can lead to developmental and health problems in children. Is that action needed to protect the public or is it not needed? | 85 | 81 | 13 | 16 | 2 | 3 |
| 3. Incentives to support more local farms, so that more money stays in local communities and more small and mid size farmers can stay in business. Is that action needed to protect the public or is it not needed? | 84 | 83 | 12 | 13 | 4 | 4 |

Q4 Version PM Only

4. Now, I'm going play for you a brief statement. After it is done playing, I'll come back on and ask for your reaction, so please listen carefully. (PLAY) How much have you heard about this Runaway Food System concept – a lot, some, a little, or nothing?

| | |
|------------------|----|
| A lot | 16 |
| Some | 22 |
| A little | 26 |
| Nothing | 35 |
| Don't know (VOL) | - |

Experts are increasingly concerned about what they call our Runaway Food System. The way we produce food today has fundamentally changed, and now has the power to alter the foundations of life as we know it, almost inadvertently. Some experts are particularly concerned about farming chemicals like pesticides and weed-killer that are permanently altering our soil and water. Others focus on genetic engineering that is changing the nature of the plants and animals we eat. And still others are most concerned about mile-long fishing nets that drag along the ocean floor and alter ecosystems. All these experts warn that until we get our runaway food system under control, it will do more damage to the foundations we depend on.

5. Now, I'm going play for you a brief statement about the [runaway] food system. After it is done playing, I'll come back on and ask for your reaction, so please listen carefully. (PLAY) Having heard that statement, how concerned are you about the food production system -- extremely concerned, very concerned, somewhat concerned, or not at all concerned?

| | P | P/M |
|----------------------------|----------|------------|
| Extremely concerned | 20 | 22 |
| Very concerned | 38 | 35 |
| Somewhat concerned..... | 34 | 36 |
| Not at all concerned | 7 | 8 |
| Don't know (VOL) | - | - |

We expect our food system to be dependable and trustworthy, but it is becoming increasingly clear that decisions are being made in food production that affect us all and some experts are beginning to call for changes to protect us. For example, the pesticides and hormones that are used in growing food, and the distance that food travels, have an effect on our health and environment. Take broccoli as just one example. Two heads of broccoli that look exactly the same, can have far different health benefits. Some experts are particularly concerned about the distance food travels. If broccoli travels for two weeks before arriving at a grocery store, it loses most of its vitamin C, and almost all of its calcium, iron and potassium, and the same is true for other fruits and vegetables. Other experts focus more on the pesticides and chemical fertilizers that can have environmental and health consequences. Most experts agree that the health and nutrition that people expect from food, and that parents expect for their children, is being undermined by our [runaway] food system, and there are changes we can make now that will protect our wellbeing.

There are several consequences of shipping foods long distances. For each of the following, please tell me how concerned you are about that consequence of shipping food long distances – extremely concerned, very concerned, somewhat concerned, or not at all concerned:

| | Extremely Concerned | | Very Concerned | |
|---|---------------------|-------------------|------------------|-------------------|
| | Protection Alone | Protection/ Model | Protection Alone | Protection/ Model |
| 6. The health consequences, meaning that fresh fruits and vegetables lose much of their nutritional value over time. So we think we are getting healthy food, when the reality is that food doesn't have as many health benefits because it has been traveling for days and weeks. (How concerned you are about that – extremely, very, somewhat, or not at all concerned?) | 23 | 20 | 37 | 38 |
| 7. The economic consequences, meaning that when we rely upon multi-national corporate farms to produce our food, it weakens farm economies in rural America and limits the availability of fresh, local foods. (How concerned you are about that – extremely, very, somewhat, or not at all concerned?) | 22 | 21 | 42 | 42 |
| 8. The environmental consequences -- farms can be a strong steward of the environment; instead, many agriculture industry practices actually harm the environment. For example, transporting food long distances wastes energy and pollutes our environment. (How concerned you are about that – extremely, very, somewhat, or not at all concerned?) | 21 | 20 | 40 | 36 |

9. Now, I'm going play for you a brief statement about the [runaway] food system. After it is done playing, I'll come back on and ask for your reaction, so please listen carefully. (PLAY) Having heard that statement, how much of a priority should it be to address problems in the food system – should it be a top priority, a high priority, somewhat of a priority, or not a priority?

| | P | P/M |
|-----------------------------|----------|------------|
| Top priority..... | 35 | 31 |
| High priority..... | 43 | 45 |
| Somewhat of a priority..... | 16 | 19 |
| Not a priority..... | 6 | 4 |
| Don't know (VOL)..... | 1 | 2 |

There are lots of things that we can do today to [fix the food system/get control of the runaway food system] and turn it into a system that provides healthy food while protecting the environment and rural economies. In fact, several cities and states are already acting on solutions. Fifteen cities have just completed plans to encourage small and mid-size farms in their region, with distribution networks for locally grown, healthy foods. And some states now require that food contracts for state institutions like hospitals, give priority to locally grown food. If we expand these practices, the proportion of healthy, locally grown food will increase from just 2% of our food to 10% or more, and protect our health and environment at the same time. We owe it to ourselves, and our children, [to fix the food system/to get control of the runaway food system] now.

Version L (n=404) and LM (n=397)

Recently there has been quite a lot of news coverage concerning the consequences of how we grow food. Some experts suggest that new approaches are needed to ensure that we will be able to produce healthy food for today and for generations to come. For each of the following, please tell me whether or not you think that approach is needed for the long-term viability of the food system:

| | Needed | | Not Needed | | Don't Know | |
|---|--------------|---------------|--------------|---------------|--------------|---------------|
| | Legacy Alone | Legacy/ Model | Legacy Alone | Legacy/ Model | Legacy Alone | Legacy/ Model |
| 1. Tighter restrictions on the use of pesticides and hormones, since they can build up in the food chain and affect future generations. Is that action needed for the long-term viability of the food system or is it not needed? | 75 | 75 | 21 | 20 | 5 | 4 |
| 2. Rules to stop overly intensive farming practices that wear out the nutrients in farm soil, since that erodes our ability to produce food in the years to come. Is that action needed for the long-term viability of the food system or is it not needed? | 65 | 65 | 25 | 26 | 10 | 8 |
| 3. Incentives to support more local farms, making it possible in the future for more food to be produced and eaten locally. Is that action needed for the long-term viability of the food system or is it not needed? | 80 | 83 | 14 | 13 | 6 | 3 |

Q4 Version LM Only

4. Now, I'm going play for you a brief statement. After it is done playing, I'll come back on and ask for your reaction, so please listen carefully. (PLAY) How much have you heard about this Runaway Food System concept – a lot, some, a little, or nothing?

| | |
|------------------|----|
| A lot | 14 |
| Some | 26 |
| A little | 25 |
| Nothing | 36 |
| Don't know (VOL) | - |

Experts are increasingly concerned about what they call our Runaway Food System. The way we produce food today has fundamentally changed, and now has the power to alter the foundations of life as we know it, almost inadvertently. Some experts are particularly concerned about farming chemicals like pesticides and weed-killer that are permanently altering our soil and water. Others focus on genetic engineering that is changing the nature of the plants and animals we eat. And still others are most concerned about mile-long fishing nets that drag along the ocean floor and alter ecosystems. All these experts warn that until we get our runaway food system under control, it will do more damage to the foundations we depend on.

5. Now, I'm going play for you a brief statement about the [runaway] food system. After it is done playing, I'll come back on and ask for your reaction, so please listen carefully. (PLAY) Having heard that statement, how concerned are you about the food production system -- extremely concerned, very concerned, somewhat concerned, or not at all concerned?

| | L | L/M |
|---------------------------|----|-----|
| Extremely concerned..... | 21 | 16 |
| Very concerned..... | 32 | 30 |
| Somewhat concerned..... | 39 | 44 |
| Not at all concerned..... | 7 | 9 |
| Don't know (VOL)..... | 1 | 1 |

We expect our food system to produce what we need now and for generations to come, but it is becoming increasingly clear that decisions are being made in food production that will affect the food system far into the future. Experts say that the pesticides and hormones that are used in growing food, and the distance that food travels, have long-term consequences on the food system's viability. Some experts are particularly concerned about food that is produced halfway across the country, or across the globe, which weakens farm economies and puts at risk our ability to produce food in years to come because more and more farmers quit farming. Other experts focus more on the pesticides and chemical fertilizers that can have long-term consequences for human health and the environment. Most experts agree that short-term decisions made by food producers in our food system have long-term consequences, and there are changes we can make now that will ensure we have a stable, healthy food system for our children and grandchildren.

There are several consequences of shipping foods long distances. For each of the following, please tell me how concerned you are about that consequence of shipping food long distances – extremely concerned, very concerned, somewhat concerned, or not at all concerned:

| | Extremely Concerned | | Very Concerned | |
|--|---------------------|---------------|----------------|---------------|
| | Legacy Alone | Legacy/ Model | Legacy Alone | Legacy/ Model |
| 6. The long-term health consequences, meaning that fresh fruits and vegetables lose much of their nutritional value over time. Since we are increasingly reliant upon food that has been traveling for days and weeks, the amount of nutrition in our diet has been shrinking, and that has long-term health consequences across generations. (How concerned you are about that – extremely, very, somewhat, or not at all concerned?) | 18 | 15 | 35 | 31 |
| 7. The long-term economic consequences, meaning that when we rely upon multi-national corporate farms to produce our food, it harms the long-term viability of farm economies in rural America. (How concerned you are about that – extremely, very, somewhat, or not at all concerned?) | 22 | 20 | 37 | 43 |
| 8. The long-term environmental consequences, meaning that transporting food long distances wastes enormous amounts of energy, and pollutes and degrades the environment we leave for future generations. (How concerned you are about that – extremely, very, somewhat, or not at all concerned?) | 20 | 18 | 38 | 36 |

9. Now, I'm going play for you a brief statement about the [runaway] food system. After it is done playing, I'll come back on and ask for your reaction, so please listen carefully. (PLAY) Having heard that statement, how much of a priority should it be to address problems in the food system – should it be a top priority, a high priority, somewhat of a priority, or not a priority?

| | L | L/M |
|-----------------------------|----|-----|
| Top priority..... | 38 | 31 |
| High priority | 41 | 42 |
| Somewhat of a priority..... | 18 | 21 |
| Not a priority | 3 | 5 |
| Don't know (VOL)..... | - | 2 |

There are lots of things that we can do today [to fix the food system/to get control of the runaway food system] and turn it into a system that provides healthy food while protecting the environment and rural economies now and into the future. In fact, several cities and states are already acting on long-term solutions. Fifteen cities have just completed plans to encourage small and mid-size farms in their region, with distribution networks for locally grown, healthy foods. And some states now require that food contracts for state institutions, like hospitals, give priority to locally grown food. If we expand these practices, the proportion of healthy, locally grown food will increase from just 2% of our food to 10% or more, strengthening our food system for the future. We owe it to our children and grandchildren [to fix the food system/to get control of the runaway food system] now.

Version R (n=395) and RM (n=383)

Recently there has been quite a lot of news coverage concerning the consequences of how we grow food. Some experts suggest that new approaches are needed to ensure that rural communities will be able to produce the food our country needs and in ways that keep us and our economy healthy. For each of the following, please tell me whether or not you think that approach is needed to ensure that communities can produce food:

| | Needed | | Not Needed | | Don't Know | |
|---|-------------------|--------------------|-------------------|--------------------|-------------------|--------------------|
| | Reciprocity Alone | Reciprocity/ Model | Reciprocity Alone | Reciprocity/ Model | Reciprocity Alone | Reciprocity/ Model |
| 1. Rules to limit or eliminate certain kinds of farm chemicals since they can pollute air and waterways throughout surrounding communities. Is that action needed to ensure that communities can produce food or is it not needed? | 72 | 68 | 23 | 24 | 5 | 8 |
| 2. Regional planning strategies that keep major economic development to those areas with existing roads and services, and protect rural areas and farms from further urban sprawl. Is that action needed to ensure that communities can produce food or is it not needed? | 81 | 71 | 14 | 20 | 5 | 8 |
| 3. Incentives to support more local farms, so that states and regions have more say over their food supply and more small and mid size farmers can stay in business. Is that action needed to ensure that communities can produce food or is it not needed? | 84 | 80 | 12 | 15 | 4 | 5 |

Q4 Version RM Only

4. Now, I'm going play for you a brief statement. After it is done playing, I'll come back on and ask for your reaction, so please listen carefully. (PLAY) How much have you heard about this Runaway Food System concept – a lot, some, a little, or nothing?

| | |
|------------------|----|
| A lot | 14 |
| Some | 20 |
| A little | 27 |
| Nothing | 39 |
| Don't know (VOL) | 1 |

Experts are increasingly concerned about what they call our Runaway Food System. The way we produce food today has fundamentally changed, and now has the power to alter the foundations of life as we know it, almost inadvertently. Some experts are particularly concerned about farming chemicals like pesticides and weed-killer that are permanently altering our soil and water. Others focus on genetic engineering that is changing the nature of the plants and animals we eat. And still others are most concerned about mile-long fishing nets that drag along the ocean floor and alter ecosystems. All these experts warn that until we get our runaway food system under control, it will do more damage to the foundations we depend on.

5. Now, I'm going play for you a brief statement about the [runaway] food system. After it is done playing, I'll come back on and ask for your reaction, so please listen carefully. (PLAY) Having heard that statement, how concerned are you about the food production system -- extremely concerned, very concerned, somewhat concerned, or not at all concerned?

| | R | R/M |
|---------------------------|----------|------------|
| Extremely concerned..... | 19 | 16 |
| Very concerned..... | 37 | 27 |
| Somewhat concerned..... | 36 | 41 |
| Not at all concerned..... | 7 | 14 |
| Don't know (VOL)..... | 1 | 2 |

We expect our food system to produce what we all need, regardless of where we live, but it is becoming increasingly clear that decisions are being made in food production that will keep shifting control and planning away from local communities, affecting us all. Some experts are particularly concerned about the distance food travels. Right now, most of our food travels an average of one thousand five hundred miles. When food is produced by multi-national corporations halfway across the country, or across the globe, then communities have less control over their sources of food. Other experts focus on the environmental and nutritional benefits of food that is grown and consumed locally. Take broccoli as just one example. Two heads of broccoli that look exactly the same, can have far different health benefits. If broccoli travels for two weeks before arriving at a grocery store, it will lose most of its vitamin C, and almost all of its calcium, iron and potassium. The same is true of other fruits and vegetables. Still other experts suggest that when markets purchase food from the farmers closest to them, the economic effect ripples throughout the state. Most experts agree that local communities are being undermined by our food system, and there are changes we can make now that will strengthen local food production.

There are several consequences of shipping foods long distances. For each of the following, please tell me how concerned you are about that consequence of shipping food long distances – extremely concerned, very concerned, somewhat concerned, or not at all concerned:

| | Extremely Concerned | | Very Concerned | |
|---|---------------------|--------------------|-------------------|--------------------|
| | Reciprocity Alone | Reciprocity/ Model | Reciprocity Alone | Reciprocity/ Model |
| 6. The health consequences, meaning that fresh fruits and vegetables lose much of their nutritional value over time. Food that is grown outside the local area, that has been traveling for days and weeks, has less nutritional value. | 26 | 19 | 40 | 35 |
| 7. The economic consequences, meaning that when we rely upon multi-national corporate farms to produce our food and ship it around the world, it weakens farm economies in rural America and undermines our ability to produce our own food | 29 | 20 | 39 | 36 |
| 8. The environmental consequences, meaning that transporting food long distances wastes energy, and pollutes and degrades the environment in all of our communities. | 27 | 19 | 36 | 37 |

9. Now, I'm going play for you a brief statement about the [runaway] food system. After it is done playing, I'll come back on and ask for your reaction, so please listen carefully. (PLAY) Having heard that statement, how much of a priority should it be to address problems in the food system – should it be a top priority, a high priority, somewhat of a priority, or not a priority?

| | R | R/M |
|-----------------------------|----------|------------|
| Top priority..... | 34 | 28 |
| High priority..... | 42 | 37 |
| Somewhat of a priority..... | 19 | 26 |
| Not a priority..... | 5 | 8 |
| Don't know (VOL)..... | - | 1 |

There are lots of things that we can do today to get control of the [runaway] food system and turn it into a system that provides healthy food to local communities while protecting the environment and rural economies. In fact, several cities and states are already acting. Fifteen cities have just completed plans to encourage small and mid-size farms in their region, with distribution networks for locally grown, healthy foods. And some states now require that food contracts for state institutions, like hospitals, give priority to locally grown food. If we expand these practices, the proportion of healthy, locally grown food will increase from just 2% of our food to 10% or more, strengthening local economies. Every community will benefit from a greater emphasis on local food production, so we need [to fix the food system/to get control of the runaway food system] now.

Version C1M

QUESTIONS 1-3 SKIPPED

4. First, I'm going play for you a brief statement. After it is done playing, I'll come back on and ask for your reaction, so please listen carefully. (PLAY) How much have you heard about this Runaway Food System concept – a lot, some, a little, or nothing?

| | |
|------------------|----|
| A lot | 15 |
| Some | 19 |
| A little | 22 |
| Nothing | 44 |
| Don't know (VOL) | - |

Experts are increasingly concerned about what they call our Runaway Food System. The way we produce food today has fundamentally changed, and now has the power to alter the foundations of life as we know it, almost inadvertently. Some experts are particularly concerned about farming chemicals like pesticides and weed-killer that are permanently altering our soil and water. Others focus on genetic engineering that is changing the nature of the plants and animals we eat. And still others are most concerned about mile-long fishing nets that drag along the ocean floor and alter ecosystems. All these experts warn that until we get our runaway food system under control, it will do more damage to the foundations we depend on.

QUESTIONS 5-8 SKIPPED

9. How much of a priority should it be to address problems in the food system – should it be a top priority, a high priority, somewhat of a priority, or not a priority?

| | |
|-----------------------------|----|
| Top priority..... | 26 |
| High priority | 39 |
| Somewhat of a priority..... | 28 |
| Not a priority | 5 |
| Don't know (VOL)..... | 1 |

Version C1C2

QUESTIONS 1-8 SKIPPED

9. How much of a priority should it be to address problems in the food system – should it be a top priority, a high priority, somewhat of a priority, or not a priority?

| | |
|-----------------------------|----|
| Top priority..... | 30 |
| High priority | 34 |
| Somewhat of a priority..... | 22 |
| Not a priority | 8 |
| Don't know (VOL)..... | 6 |

BEGIN ASKING ALL VERSIONS

For each of the following ideas, please tell me if you favor or oppose it. (Follow up) And do you feel strongly or not so strongly about that?

| % Strongly Favor, % Favor | | | | | | | | |
|---|---------|------------|------------|-------------------|--------|--------------|-------------|--------------|
| RANDOMIZE ORDER | Control | Model Only | Protection | Protection /Model | Legacy | Legacy/Model | Reciprocity | Recip./Model |
| 10. Require that any farmer or rancher receiving federal money use practices to protect the environment | 62, 87 | 65, 86 | 70, 89 | 68, 90 | 68, 91 | 70, 92 | 69, 90 | 63, 88 |
| 11. Develop training programs to teach farmers and ranchers environmentally-sound ways to operate | 52, 84 | 63, 88 | 63, 91 | 63, 90 | 69, 93 | 66, 94 | 64, 90 | 62, 89 |
| 12. Change the agriculture subsidies so they provide increased revenue for farmers who provide locally grown food | 49, 82 | 53, 84 | 63, 88 | 58, 87 | 62, 88 | 62, 91 | 59, 85 | 56, 85 |
| 13. Develop local economic development plans that ensure that enough farmland remains available to produce a significant share of food for the local area | 69, 89 | 64, 91 | 71, 92 | 63, 92 | 71, 94 | 71, 91 | 70, 91 | 65, 91 |
| 14. Increase the percentage of locally grown food that is available in communities, by creating ways for farmers to sell directly to local consumers, such as farmer-operated supermarkets | 61, 90 | 62, 90 | 72, 90 | 70, 90 | 71, 94 | 70, 94 | 68, 92 | 67, 90 |
| 15. Require that schools stop selling students junk food or food with limited nutritional value | 64, 81 | 66, 83 | 67, 80 | 68, 83 | 72, 86 | 72, 85 | 68, 85 | 66, 84 |
| 16. Create incentives for public institutions such as schools to give a preference to local and regional farmers when purchasing food | 46, 81 | 55, 86 | 68, 90 | 56, 88 | 63, 91 | 60, 91 | 62, 90 | 59, 86 |
| 17. Increase the number of community gardens in urban areas by providing tax breaks to turn abandoned city lots into thriving gardens that produce food in urban communities | 49, 81 | 53, 84 | 60, 85 | 58, 84 | 64, 88 | 58, 89 | 60, 85 | 57, 85 |
| 18. Some urban communities lack access to healthy, affordable food; in these communities, provide incentives to build supermarkets | 35, 71 | 36, 77 | 43, 77 | 39, 74 | 45, 80 | 41, 78 | 42, 77 | 40, 76 |
| 19. Change food stamps so they provide enough of an allotment to purchase more fresh foods | 47, 72 | 51, 80 | 58, 82 | 51, 77 | 59, 80 | 58, 81 | 57, 80 | 55, 81 |
| 20. Shift agriculture subsidies so that instead of supporting crops for processed foods and animal feed, the subsidies instead result in lower costs for locally grown fresh foods and vegetables | 48, 78 | 50, 81 | 57, 88 | 55, 84 | 54, 87 | 55, 89 | 54, 83 | 54, 84 |
| 21. Expand programs which connect local farms to schools so | 64, 91 | 71, 93 | 71, 94 | 74, 92 | 76, 95 | 73, 94 | 70, 94 | 68, 93 |

| | | | | | | | | |
|---|--|--|--|--|--|--|--|--|
| students learn about fresh food and nutrition | | | | | | | | |
|---|--|--|--|--|--|--|--|--|

22. Which of the following is the most important reason for our country to address problems in the food system:

VERSION P

RANDOMIZE

1. To protect our health, since local fresh food retains more of its nutrition
2. To guard our environment, since local food doesn't waste a lot of energy and pollute the air with long-distance transportation
3. To preserve rural economies and keep more small and mid-size farmers in business

| | P | P/M |
|-----------------------------|----------|------------|
| To protect our health | 48 | 41 |
| To guard our environment | 13 | 18 |
| To preserve rural economies | 22 | 23 |
| All (VOL) | 13 | 15 |
| None (VOL) | 2 | 1 |
| Don't know (VOL) | 2 | 2 |

VERSION L

RANDOMIZE

1. To ensure health benefits for the long term, since local fresh food retains more of its nutrition
2. To leave our environment in good shape for future generations, since local food doesn't waste a lot of energy and pollute the air with long-distance transportation
3. To strengthen rural economies, so that communities can maintain an ability to produce more of their own food for the long term

| | L | L/M |
|---|----------|------------|
| To ensure health benefits for the long term | 31 | 23 |
| To leave our environment in good shape for future generations | 25 | 29 |
| To strengthen rural economies | 25 | 24 |
| All (VOL) | 15 | 20 |
| None (VOL) | 3 | 2 |
| Don't know (VOL) | - | 2 |

VERSION R

RANDOMIZE

1. To improve a community's health, since local fresh food retains more of its nutrition
2. To preserve a community's environment, since local food doesn't waste a lot of energy and pollute the air with long-distance transportation
3. To give back to rural economies, since money spent by a community goes to support farmers in its own community and we need healthy rural communities for a strong country

| | R | R/M |
|---------------------------------------|----------|------------|
| To improve a community's health | 36 | 29 |
| To preserve a community's environment | 17 | 27 |
| To give back to rural economies | 26 | 26 |
| All (VOL) | 15 | 12 |
| None (VOL) | 3 | 3 |
| Don't know (VOL) | 2 | 3 |

VERSION M

23. When you think about the ways the Runaway Food System is inadvertently altering the foundations of life, which of the following concerns you most:

RANDOMIZE ORDER

1. That farming chemicals are permanently altering our soil and water.
2. That genetic engineering is changing the nature of the plants and animals we eat.
3. That mile-long fishing nets are dragging along the ocean floor and altering ecosystems.

| | Model Alone | Protection/ Model | Legacy/ Model | Reciprocity/ Model |
|------------------------|-------------|-------------------|---------------|--------------------|
| Farming chemicals | 42 | 35 | 43 | 36 |
| Genetic engineering | 25 | 25 | 23 | 23 |
| Mile-long fishing nets | 14 | 14 | 15 | 17 |
| All (VOL) | 14 | 18 | 15 | 15 |
| None (VOL) | 3 | 4 | 2 | 5 |
| Don't know (VOL) | 1 | 4 | 3 | 4 |

RESUME ASKING ALL VERSIONS

24. How much of a priority should it be to address problems in the food system – should it be a top priority, a high priority, somewhat of a priority, or not a priority?

| | Control | Model Only | Protection | Protection /Model | Legacy | Legacy/ Model | Reciprocity | Recip./ Model |
|------------------------|---------|------------|------------|-------------------|--------|---------------|-------------|---------------|
| Top Priority | 35 | 38 | 39 | 39 | 41 | 40 | 37 | 35 |
| High Priority | 34 | 37 | 37 | 41 | 41 | 39 | 38 | 37 |
| Somewhat of a Priority | 24 | 20 | 20 | 17 | 15 | 19 | 20 | 22 |
| Not a Priority | 5 | 3 | 3 | 4 | 3 | 2 | 4 | 5 |
| Don't know | 1 | 1 | 1 | - | - | 1 | 1 | 1 |

25. Which of the following statements is closer to your view?

ROTATE

- Regulation of food production is necessary to protect the public interest.

OR

- Regulation of food production will do more harm than good.

(Follow up:) Do you feel strongly or not so strongly about that?

| | Control | Model Only | Protection | Protection /Model | Legacy | Legacy/ Model | Reciprocity | Recip./ Model |
|-------------------------|---------|------------|------------|-------------------|--------|---------------|-------------|---------------|
| Necessary, Strongly | 50 | 48 | 57 | 57 | 56 | 56 | 51 | 49 |
| Necessary, Not Strong | 22 | 21 | 18 | 18 | 16 | 18 | 21 | 16 |
| Harm, Not Strong | 8 | 8 | 7 | 8 | 6 | 7 | 7 | 9 |
| Harm, Strongly | 13 | 14 | 11 | 9 | 12 | 11 | 15 | 19 |
| Both/Neither/Don't know | 7 | 9 | 8 | 8 | 11 | 9 | 6 | 8 |

For each of the following, please tell me how much responsibility it should have for addressing the problems in the American food system – a lot of responsibility, some, a little, or not much?

| % A Lot | | | | | | | | |
|---|---------|------------|------------|-------------------|--------|---------------|-------------|---------------|
| Randomize Order | Control | Model Only | Protection | Protection /Model | Legacy | Legacy/ Model | Reciprocity | Recip./ Model |
| 26. Individual Americans and their food choices | 61 | 65 | 64 | 61 | 69 | 65 | 64 | 67 |
| 27. Manufacturers of mass-produced, processed foods | 48 | 55 | 55 | 56 | 54 | 59 | 51 | 51 |
| 28. State and local government policies on regional planning | 40 | 44 | 49 | 52 | 53 | 49 | 49 | 50 |
| 29. Government policies and laws on farming practices | 35 | 46 | 45 | 51 | 47 | 51 | 41 | 43 |
| 30. Multinational corporate farms and their food production practices | 42 | 51 | 53 | 57 | 55 | 55 | 47 | 53 |

31. To address the problems in the food system, how much importance should we place on increasing the amount of food produced by local farms – should it be very important, somewhat important, somewhat unimportant, or very unimportant?

| | Control | Model Only | Protection | Protection /Model | Legacy | Legacy/ Model | Reciprocity | Recip./ Model |
|----------------------|---------|------------|------------|-------------------|--------|---------------|-------------|---------------|
| Very important | 56 | 63 | 59 | 66 | 64 | 59 | 60 | 60 |
| Somewhat important | 36 | 29 | 35 | 28 | 31 | 36 | 34 | 32 |
| Somewhat unimportant | 4 | 6 | 2 | 3 | 3 | 3 | 4 | 5 |
| Very unimportant | 2 | 2 | 2 | 2 | 1 | 1 | 2 | 2 |
| Don't know | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |

I'm going to read to you several different labels for food. For each, please tell me if that label would make you more or less likely to buy that food, or if it would make no difference. (Follow up More/Less) And is that much more/less likely or somewhat more/less likely?

| % Much More, % Much + Somewhat More | | | | | | | | |
|---|---------|------------|------------|-------------------|--------|---------------|-------------|---------------|
| Randomize Order | Control | Model Only | Protection | Protection /Model | Legacy | Legacy/ Model | Reciprocity | Recip./ Model |
| 32. A label that said the food had been grown or raised organically | 33, 64 | 40, 70 | 36, 65 | 37, 72 | 40, 66 | 42, 67 | 40, 65 | 37, 63 |
| 33. A label that said the food had been grown or raised without the use of pesticides, hormones, or antibiotics | 48, 79 | 58, 80 | 54, 79 | 57, 83 | 57, 83 | 60, 82 | 62, 84 | 52, 77 |
| 34. A label that said the food had been grown or raised locally, meaning within your state | 47, 80 | 51, 79 | 60, 86 | 58, 85 | 58, 86 | 54, 85 | 59, 87 | 58, 82 |

For each of the following, please tell me if you are concerned about that issue -- extremely concerned, very concerned, somewhat concerned, or not at all concerned?

| % Extremely Concerned, % Extremely + Very Concerned | | | | | | | | |
|--|---------|------------|------------|-------------------|--------|---------------|-------------|---------------|
| Randomize Order | Control | Model Only | Protection | Protection /Model | Legacy | Legacy/ Model | Reciprocity | Recip./ Model |
| 35. Too much farmland in your state may be converted to houses, stores, and other nonagricultural developments | 24, 53 | 30, 58 | 31, 61 | 24, 59 | 31, 65 | 28, 59 | 29, 65 | 23, 56 |
| 36. Meat or poultry might be unsafe to eat | 37, 70 | 38, 73 | 37, 73 | 39, 73 | 41, 72 | 40, 73 | 40, 71 | 35, 72 |
| 37. Unhealthy levels of residues from agricultural pesticides may remain on fruit or vegetables | 32, 61 | 35, 67 | 34, 70 | 31, 66 | 36, 71 | 35, 70 | 35, 70 | 30, 65 |

And now, just a few more quick questions for statistical purposes. This information will only be used for analysis of this study, and will be kept completely confidential.

38. Are you currently registered to vote or not?

Yes..... 87
 No 13
 Don't know (VOL) -

39. Do you consider yourself a Democrat, Republican or Independent? **(IF INDEPENDENT, DON'T KNOW)** Would you say you are closer to the Democrats or Republicans?

Democrat..... 35
 Lean Democrat..... 5
 Independent, no lean..... 22
 Lean Republican 5
 Republican 24
 Don't know / Refused (VOL) 8

Please note which of the following you can recall ever having done.

| | No, Never Have | Yes, Have in Past Year or So | Yes, But Last Time was Longer than a Year Ago | Don't Know |
|---|----------------|------------------------------|---|------------|
| 40. Expressed your opinion by writing a letter to a newspaper or contacting an elected official | 53 | 22 | 24 | 1 |
| 41. Spoken in public for an organization or cause you cared about | 70 | 16 | 14 | - |

42. In what year were you born?
- | | |
|--------------|----|
| 18-29 | 16 |
| 30-39 | 16 |
| 40-49 | 21 |
| 50-64 | 25 |
| 65+..... | 20 |
| Refused..... | 2 |
43. What is your employment status?
- | | |
|-------------------------------|----|
| Employed full time..... | 43 |
| Employed part time | 8 |
| Self employed..... | 7 |
| Not employed but looking..... | 4 |
| Homemaker | 7 |
| Student | 4 |
| Retired..... | 24 |
| Other, not working | 3 |
| Refused (VOL)..... | 1 |
44. Are you married, living with a partner, single, separated, widowed, or divorced?
- | | |
|-----------------------|----|
| Married | 58 |
| Living with a partner | 4 |
| Single, never married | 19 |
| Separated/divorced | 8 |
| Widowed | 9 |
| Refused (VOL) | 1 |
45. **(IF MARRIED)** Does your spouse (partner) work, part-time or more, outside the home or would you say that your spouse's (partner's) work is mainly at home?
- | | |
|---------------|----|
| Employed | 68 |
| At home | 29 |
| Refused (VOL) | 3 |
46. Do you have any children?
- | | |
|---------------|------------------|
| Yes | 75 |
| No | 25 (SKIP TO Q47) |
| Refused (VOL) | 1 (SKIP TO Q47) |
47. **(IF YES)** In which of the following age groups do they belong? **(CHECK ALL THAT APPLY)**
- | | |
|-------------------|----|
| Under 2 years old | 8 |
| 2-5 years old | 13 |
| 6-11 years old | 17 |
| 12-18 years old | 19 |
| Over 18 years old | 62 |
| Refused (VOL) | 1 |

48. What is the last year of schooling that you have completed?

| | |
|--|----|
| 1 - 11th grade | 11 |
| High school graduate/GED | 25 |
| Non-college post H.S., vocational, trade or business school after high school | 2 |
| Some college (no degree) | 20 |
| Associate degree (AA or other 2-year degree) | 8 |
| College graduate (Bachelor's degree) | 22 |
| Post-graduate school/Masters or PHD | 11 |
| Refused (VOL) | 1 |

49. What is your race? (MARK MORE THAN ONE IF NEEDED)

| | |
|----------------------------------|----|
| White | 70 |
| Black or African American | 12 |
| Hispanic/Latino | 11 |
| American Indian or Alaska Native | 1 |
| Asian Indian | 1 |
| Chinese | - |
| Filipino | - |
| Japanese | - |
| Korean | - |
| Other Asian | 1 |
| Native Hawaiian | - |
| Other Pacific Islander | - |
| Some other race | 1 |
| Refused (VOL) | 3 |

50. And are you of Spanish or Hispanic descent? (MARK MORE THAN ONE IF NEEDED)

| | |
|---|----|
| No, not Spanish/Hispanic/Latino | 86 |
| Yes, Mexican, Mexican American, Chicano | 8 |
| Yes, Puerto Rican | 1 |
| Yes, Cuban | - |
| Yes, other | 3 |
| Refused (VOL) | 2 |

Finally, how did you feel about this survey? What one or two words would you use to describe your experience in taking this survey?

| | Control | Model Only | Protection | Protection /Model | Legacy | Legacy/ Model | Recipro city | Recip./ Model |
|----------------------------|---------|---------------|------------|----------------------|--------|------------------|-----------------|------------------|
| Positive Net | 73 | 75 | 76 | 74 | 67 | 70 | 71 | 66 |
| Interesting/informative | 32 | 38 | 35 | 42 | 35 | 39 | 35 | 35 |
| Liked it/good experience | 23 | 19 | 23 | 19 | 17 | 16 | 21 | 18 |
| Worried/scared/concerned | 2 | 2 | 4 | 3 | 2 | 3 | 4 | 3 |
| Want to take action | 2 | 1 | 2 | 1 | 2 | 1 | 1 | 1 |
| Other positive | 14 | 15 | 12 | 9 | 10 | 10 | 11 | 9 |
| Negative Net | 21 | 17 | 20 | 21 | 29 | 26 | 25 | 28 |
| Too long/glad it's over | 7 | 8 | 11 | 12 | 20 | 15 | 16 | 15 |
| Too difficult/confusing | 6 | 2 | 3 | 2 | 3 | 3 | 3 | 5 |
| Biased/fear tactics/agenda | 2 | 1 | 3 | 2 | 3 | 4 | 3 | 4 |
| Other negative | 6 | 6 | 3 | 5 | 4 | 4 | 3 | 4 |
| Don't know | 6 | 8 | 3 | 5 | 4 | 4 | 3 | 6 |

THANK YOU VERY MUCH FOR YOUR TIME. [TERMINATE]