
PINK SLIME

A crisis case study

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Background

On April 12, 2011, the season two premier of Jamie Oliver's Food Revolution, a show about the American food industry, depicted Oliver criticizing beef production processes he claims make ground beef unfit for human consumption. On this episode, Oliver distinguishes between cuts of beef, referring to “trimmings,” which contain a much higher lean-to-fat ratio, as “waste products.” He goes on to demonstrate what he understands to be the process for retrieving viable ground beef from leftover cuts of beef.

Oliver places several of these cuts into a household clothes dryer and spins them in order to simulate the first step of the process. Next, he places the meat into a large plastic container and adds household cleaning-grade ammonia mixed with water to simulate the disinfecting process. Finally, he grinds the meat and calls the finished product “pink slime,” claiming a similar method is used to produce the ground beef fed to child in schools and sold on shelves at grocery stores (Oliver, 2011).

The process he refers to in this episode is a loose representation of one used by Beef Products Inc., a Midwest-based meat processing company, to produce what they term Lean Finely Textured Beef (LFTB). At the time, over 70 percent of ground beef sold and consumed in the United States contained BPI’s product (Oliver, 2011).

Beef Products, Inc.

The process for making LFTB is one of many innovative solutions BPI has contributed to the American food industry. Headquartered in Dakota Dunes, South Dakota, BPI is a family-owned set of companies that were founded, beginning in 1976, by Eldon Roth and his wife, Regina.

In 1971, Eldon Roth started Roth Refrigeration and invented the Roller Press Freezer, revolutionizing the way meat is frozen. Not only did the Roller Press Freezer reduce freezing time from three to five days down to two minutes, this new process for freezing meat products locks in naturally occurring moisture, which in turn enhances flavor and tenderness (Beef Products, Inc., 2013).

In 1981, Roth built the first BPI production plant in Amarillo, Texas, utilizing the Roller Press Freezer system. Ten years later, after increasing demand necessitated the building of a second facility in Finney Country, Kansas, BPI began producing lean beef products using yet another innovative technique.

Just Beef

LFTB is nothing more than beef separated from the fat. The term “trimmings” refers to chunks of meat that result when large carcasses are carved into steaks, roasts and other more recognizable cuts of beef. In the past, these trimmings were wasted because separating the lean from fat was simply not possible. After the carcass is broken down and all the cuts separated, what remain are the fattier trimmings. These cuts are simmered at a low temperature to begin separating the lean from the fat, and then spun to finish the separation. A “puff” of ammonia hydroxide is then applied to raise the pH level in the beef in order to help prevent foodborne illness caused by pathogens such as E.Coli (Beef Products, Inc., 2013).

Ammonium hydroxide, the final step in BPI’s LFTB process, was approved by the Food and Drug Administration in 1974 and is considered GRAS, or Generally Recognized as Safe. FDA considers ammonium hydroxide as a processing agent for

antimicrobial use to kill pathogens, such as E.Coli 0157:H7 or salmonella (Beef Products, Inc., 2013).

BPI adopted ammonium hydroxide treatment of its LFTB products in order to kill the pathogenic bacteria that may otherwise be present in the meat, and they have gone beyond USDA's current pathogen testing requirements for these harmful bacteria. In 1998, BPI implemented "hold and test" program for *E.coli O157:H7*, where samples from every box of LFTB produced are sent to independent, outside laboratories for testing. BPI was the first company in the beef industry to implement such a finished product sampling and testing program (Beef Products, Inc., 2013).

In an article from March 2012, Food Safety News describes the hold and test process (Entis, 2012).

Every box of LFTB is sampled, and the samples sent to independent third-party labs for analysis. Every box of LFTB is held at the plant until the labs confirm that all specifications – including the absence of Salmonella, E. coli O157:H7 and other STEC bacteria – have been met. Only once the satisfactory results have been confirmed does the company allow its product to leave the premises.

Pink Slime

Former USDA microbiologist Gerald Zirnstein coined the term “pink slime” in 2002 after touring a BPI facility (Fox News, 2012). In a private e-mail, Zirnstein told colleagues he did not “consider the stuff to be ground beef.” The term was not used publicly until a New York Times investigative piece questioned the safety of meat treated by BPI's process (Moss, 2009), and did not gain national attention until a series of reports

from ABC News established the “pink slime” controversy by bringing widespread public attention to BPI’s product (ABC News, 2012).

In the reports aired by ABC, Zirnstein is cited as a credible source and dubbed a “whistleblower.” Zirnstein calls BPI’s product “economic fraud” and “a cheap substitute.”

Timeline of Events

1990: USDA's Food Safety and Inspection Service (FSIS) approves use of the basic technology involved in manufacturing Lean Finely Textured Beef (Moss, 2009).

1994: As a response to public health concerns over E. coli in beef, the founder of BPI, Eldon Roth, begins work on a "pH Enhancement System," which disinfects meat using anhydrous ammonia in gaseous form, and rapid freezing to 28°F (Beef Products, Inc.).

2001: The FSIS approves the gaseous disinfection system and the disinfected product for human consumption (Moss, 2009).

2002: Dr. Gerald Zirnstein coins the term "pink slime" in an internal e-mail after touring a BPI facility (Fox News, 2012).

2003: BPI commissions a study to investigate the disinfection process's effectiveness and safety. Iowa State University researchers find no issues with the product or the ground beef containing it (Moss, 2009).

2007: USDA determines the disinfection process is so effective that it would be exempt from routine testing of meat used in hamburger sold to the general public (Moss, 2009).

2008: A Washington Post article reports the amount of LFTB in ground beef could be up to 25 percent, but usually does not exceed this amount (Shin, 2008).

Dec. 2009: A New York Times investigative piece questions the safety of meat treated by BPI's process. The article contains the first public use of the term "pink slime" (Moss, 2009).

Jan. 2010: New York Times publishes an editorial piece reiterating concerns posed in the news article while noting that no meat produced by BPI is linked to illness (Editorial , 2010).

April 12, 2011: An episode of Jamie Oliver's Food Revolution depicts Oliver criticizing the use of "pink slime" in the food supply and in school lunches, using inaccurate yet sensational demonstrations to illustrate the production process (Oliver, 2011).

August 2011: McDonald's discontinues the use of BPI products in their food (Rosenbaum, 2012).

March 8, 2012: A series of reports from ABC News establishes the "pink slime" controversy by bringing widespread public attention to product (ABC News, 2012).

March 21, 2012: Safeway Inc., the second-largest food distributor in the United States, discontinues sales of beef containing the additive in its stores. Walmart, SuperValu and Kroger follow suit (Avila, 2012).

March 22, 2012: USDA Under Secretary for Food Safety, Dr. Elizabeth Hagen, issues a statement that LFTB is safe and has been included in consumer products for a long time (Hagen, 2012).

March 25, 2012: BPI announces it will suspend the production of LFTB at three of its four plants, affecting over 600 employees (Boettcher, 2012).

April 4, 2012: A Harris Interactive survey commissioned by Red Robin finds 88 percent of adults are aware of the "pink slime" issue. Of those who are aware, 76 percent indicate they are at least "somewhat concerned" (O'Brien, 2012).

April 16, 2012: Cargill significantly cuts production of their own similar product and warns that public resistance to the filler could lead to higher hamburger prices (Huffstutter & Baertlein, 2012).

Sept. 13, 2012: BPI announces that it filed a \$1.2 billion lawsuit against ABC News, three reporters (Diane Sawyer, Jim Avila and David Kerley) and others, claiming damages as a result of their reports on "pink slime" (Kinsman, 2012).

Relevant Theories

The theories that can be applied to the "pink slime" case are Agenda Setting, Framing, Cultivation, the Elaboration Likelihood Model and Crisis Theory.

Agenda Setting

The media does not have the power to tell people what to think, but it can influence what the public thinks about (first level agenda setting) (McCombs et al, 1972). “Pink slime” is an example of the Agenda Setting theory because this type of beef had been on the market for more than 10 years and never received the media attention it did in March 2012. This was due to extensive international media attention, quickly followed by bloggers, Internet petitions and more.

Framing

Frames are structures used by the media to present certain perspectives (Goffman, 1974). This issue was consciously selected by news media to stir up controversy and attract media attention. The news media framed the issue in such a way that consumers were put on high-risk alert and felt there was a threat to the safety of their food. This theory states that viewers are affected and begin to believe the media’s messages and implications. Those who watch more news media coverage are more influenced by it, and will probably influence viewers’ attitudes and beliefs.

Cultivation

Cultivation theory ties directly to the “pink slime” case because the media did just this. These cultivating messages and attitudes conveyed through the news media affected viewers. This theory explains how media exposure plays a role in the formation of perceptions of reality (Gerbner, 1976).

Elaboration Likelihood

The Elaboration Likelihood Model is based on the idea that attitudes are important because attitudes guide decisions and behaviors (Petty, 1986). Viewers' attitudes can be a result of a variety of factors. However, persuasion is key when trying to change the way someone thinks or feels.

Crisis

Finally, Crisis theory is a cluster of principles or assumptions that have received the attention of practitioners and researchers. Due to the continued media exposure about "pink slime" and BPI, this was a crisis situation that received mass amounts of media coverage that gained international attention from researchers, scientists and consumers.

Response

In the wake of ABC's reports on "pink slime," one popular restaurant chain, Red Robin, who specializes in hamburgers, commissioned a Harris Interactive poll, released April 4, 2012 (O'Brien, 2012). Results showed that 88 percent of U.S. adults were aware of the "pink slime" issue. Of those aware, 76 percent indicated they were "somewhat concerned," and 30 percent reported being "extremely concerned." 53 percent of respondents who stated they were merely "aware" took some action.

BPI's initial response included the creation of their beefisbeef.com website, set up to provide concerned consumers with the facts about LFTB (Beef Products, Inc., 2013). The site provides visitors with information about BPI's production process, testimonies from food-industry scientists, and facts about agricultural innovation (see appendices A,

B, C). The goal: correct the misinformation surrounding their lean beef products and restore the company reputation.

In addition to the website, BPI CEO and founder Eldon Roth purchased advertising space in the March 23 issue of The Wall Street Journal (Roth, 2012). His personal message to consumers emphasized BPI's track record and lamented the company's portrayal in the national media (see appendix D).

Before last summer, we could not have imagined the personal, professional, financial and spiritual impact of the campaign of lies and deceit that have been waged against our company and the lean beef we produce. But over the last several weeks, that campaign has been joined by entertainment media, tabloid journalists, so-called national news - and all to what end? The clear goal expressed by the campaign organizer - put BPI out of business.

It is simply amazing how this mis-information campaign can take a company and product that has long been recognized for its quality and safety and turn the public perception so negative that it now may result in the loss of over 3,000 jobs (direct employment and companies that rely upon our business) and affected their families and communities.

Our record is unsurpassed. NEVER has a foodborne illness been associated with our lean beef over 30 years. In nearly 300,000,000,000 meals, we have been a recognized leader in food safety by groups such as the International Association for Food Protection. Look at the overwhelming support from food scientists, USDA officials, Consumer Advocate organizations academia and

customers we have received reaffirming the wholesomeness, nutrition and safety of our lean beef.

As the founder of the company, I can personally guarantee that in our 30 year history, we have never produced “pink slime.”

Eldon Roth

President & CEO

The founder and president of STOP Foodborne Illness, Nancy Donley, contributed to the advertisement with an opinion piece of her own extolling BPI’s commitment to food safety and the importance of their contributions to the food industry and consumer health (Roth, 2012).

After what I personally experienced watching my son suffer and die, I am very skeptical and cynical about for-profit meat companies and their professed commitment to food safety. Not all companies “walk their talk.” BPI does.

Several other prominent leaders in the food industry came to BPI’s defense in the weeks and months following the ABC reports. On March 22, USDA Under Secretary of Food Safety wrote a response on the USDA blog emphasizing that no foodborne illness incidents have occurred as a result of BPI’s LFTB product (Hagen, 2012). Congressman Steve King (R-IA) sent a letter to Secretary of Agriculture Tom Vilsack asking him to take steps to correct the “media driven smear campaign” (see appendix E).

Months later, in a press conference on September 13, BPI officials announced they were filing a lawsuit against ABC News and anchors Diane Sawyer, Jim Avila and David Kerly for defamation, citing 11 television reports and 14 online news items which created the wrong impression that LFTB is something other than a 100 percent beef product (Radke, 2012).

Filed in a South Dakota state court, the suit also includes the man who coined the term “pink slime,” former USDA microbiologist Gerald Zirnstein.

Conclusions and Evaluation

Days after the outbreak of media coverage and the initial responses, BPI announced the suspension of plants in Texas, Kansas and Iowa for 60 days. In the following months leading up to the lawsuit against ABC, the sharp decrease in ground beef sales, large amounts of BPI employee layoffs and terminating three of the four BPI plants in the U.S. were all brought up as evidence of the damages BPI is now facing. As of now, BPI has no plans for bankruptcy and will actively continue to pursue legal action against ABC.

BPI suffered greatly both financially and from a reputational standpoint. Their reputation, as well as the reputation of beef in general, is under attack and this negative backlash has significantly affected many of the parties involved. The results of this crisis situation include: petitions to remove BPI product from school lunches; retailers discontinuing the use of LFTB; major cutbacks made by BPI both with employees and the production of LFTB; ground beef prices have increased significantly and will continue to rise.

This case of BPI and “pink slime” caused many damages, intended or not. These damages affected roughly 700 employees, the majority of BPI’s production plants were closed, widespread misinformation about both BPI and beef production, and much more. The concept of “pink slime” came about after years of going unnoticed by the media and public due to consumers’ reactions and extensive media coverage. This strategy of reviving a story or creating an issue is not new for news media, but “pink slime” took off with such intensity that the industry did not have time to recover or respond effectively before it was too late. LFTB had been produced for more than a decade with little criticism, which shows how powerful the media and rumors can truly be in a crisis.

Not being a company that deals directly with consumers, BPI had no crisis communication plan in place to deal with the situation they found themselves in. As a result, reaction and response to the initial ABC series of reports was delayed. While appropriate tactical responses and tremendous industry support helped diffuse the situation to some degree, the “pink slime” narrative had already been written long before BPI officials could gather themselves. This crisis is due in large part to a lack of issues management, environment scanning, and BPI and the food industry failing to take control of their story from the beginning.


Appendices

Appendix A

GET THE FACTS

What You Need
to Know about
**Lean Beef
Trimmings**


↓



Lean Beef Trimmings are
100% BEEF
Wholesome and Nutritious

↓

- ✓ It's 100% beef and processed from beef trimmed from steaks and roasts
- ✓ The process removes the fat from the meat, resulting in a 94-97% lean beef
- ✓ Ammonium hydroxide is only one part of the robust food safety system
- ✓ Ammonium hydroxide is found naturally in all proteins we eat — plant or animal — and one of its roles is to prohibit bacteria from forming
- ✓ Ammonium hydroxide is widely used in everyday cooking from baking powder to cheese to chocolate



Lean Beef Trimmings
are Nutritious,
Substantially Identical to
90% Lean Ground Beef

They are a good or excellent source
of protein, iron, zinc and many
B-vitamins

Bun — 2 oz - 50 mg
(440 ppm*)

Bacon — 1 oz - 16 mg
(160 ppm)

Condiments — 2 oz - 50 mg
(400 ppm)

Cheese — .8 oz - 38 mg
(813 ppm)

Beef — 1.6 oz - 20 mg
(200 ppm)

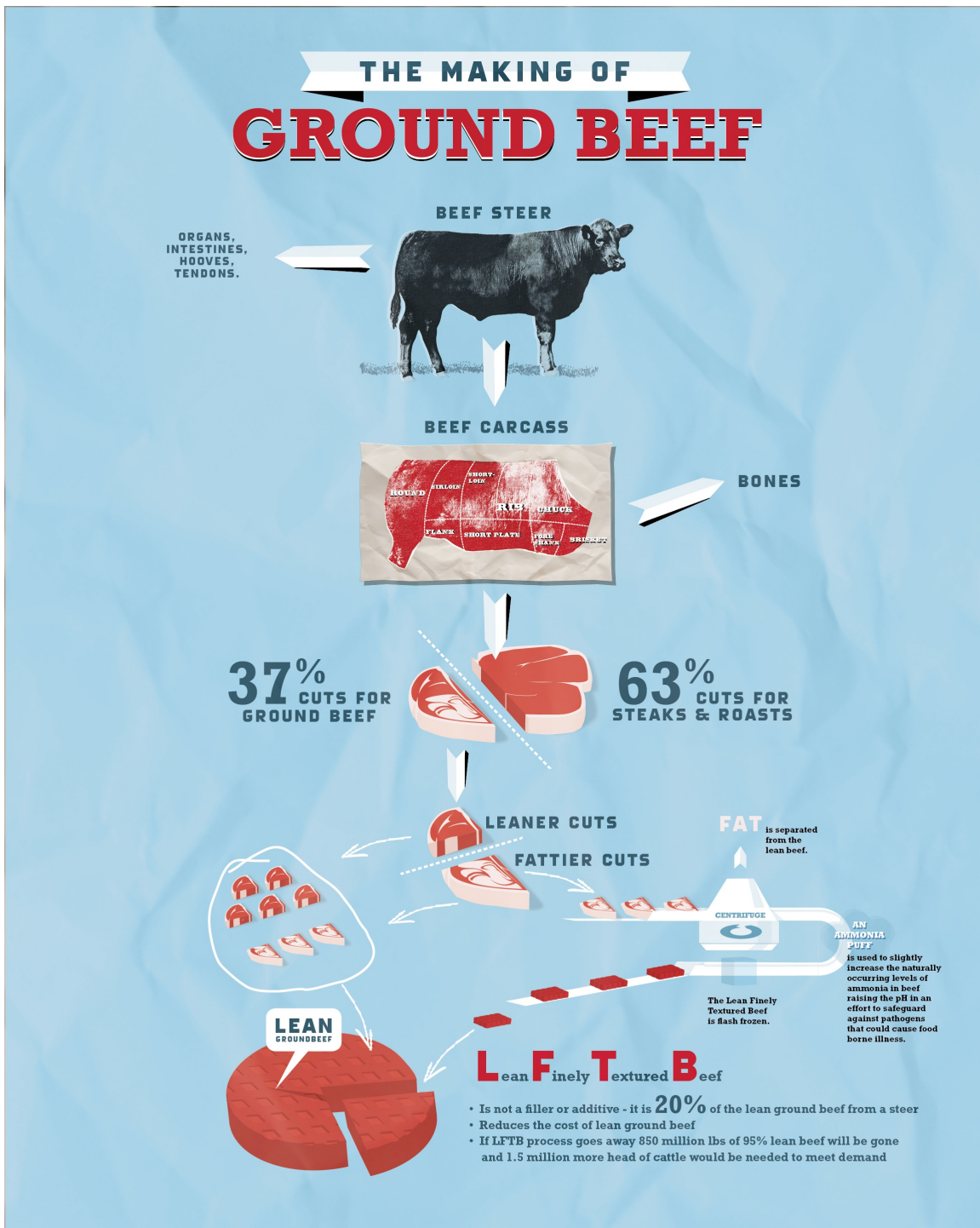
To provide perspective,
ammonium hydroxide-based
compounds can be found in
every component of a bacon
cheeseburger (bun, bacon,
cheese, condiments, and
beef) between the naturally
occurring levels and small
amounts used to make food
safer.

*ppm = parts per million of
ammonium hydroxide

GET THE FACTS

Visit www.beefisbeef.com for more information

Appendix B



Appendix C



Appendix D

THE WALL STREET JOURNAL

Friday, March 31, 2011 | A8

Advertisement

[FOR YOUR CONSIDERATION]

“After what I personally experienced watching my son suffer and die, I am very skeptical and cynical about for-profit meat companies and their professed commitment to food safety. Not all companies “walk their talk.” BPI does.”

Nancy Dowley
Founder and President
STOP Foodborne Illness

IN DEFENSE OF FOOD SAFETY LEADERSHIP

By Nancy Dowley
Opinion

My only child, Alex, died from hemolytic uremic syndrome (HUS) caused by eating a cow O157:H7-contaminated ground beef back in 1993 when he was only 4 years old. It was the most horrendous experience possible. His first symptoms were severe abdominal cramping and bowel movements that consisted strictly of blood and mucus. Alex suffered terribly as his organs shut down one by one. At one point one of his lungs collapsed, requiring bedside surgery. His brain swelled so horribly that shunts were drilled into his head in an effort to relieve the pressure, but to no avail.

My brave little boy's last words to me before slipping into a coma were, "Don't cry. Mommy," as I couldn't stop the tears from silently flowing. His last gesture to his dad was to blow him a kiss. I was with him when he suffered a grand mal seizure and was put on a ventilator. My little boy, my only child, was dead.

Alex had wanted to be a paramedic when he grew up so that he "could help others" — his words. So when he died we hoped to be able to donate his organs so that he could help that way of helping others, but his organs were unusable because of the damage caused by the E. coli toxin.

There was no cure for this awful disease then and there still isn't today. Doctors can only hope to support body systems until the toxins pass through. It is for this reason that it is critically important for meat and poultry companies to put into place prevention strategies and technologies to ensure that contaminated meat doesn't make its way into the marketplace. That's why we need to support innovations and advances that enhance food safety.

After Alex's death, I felt compelled — really more like obligated — to build his wish of helping and protecting other consumers by being his voice and working with federal regulatory agencies and with companies to see to it that we did a better job as a country in generating a safer food supply. In the process, I have visited numerous meat and poultry plants, have provided input on public policies and food safety laws, and have served on the National Advisory Board for Meat and Poultry Inspection.

One of the many plants I visited was Beef Products, Inc. I got to know the owners, Eldon and Regina Roth, and was impressed by their complete commitment to the safety and wholesomeness of the meat products they produced. I was also impressed by the food safety culture they instilled throughout

their company. We shed tears together over what happened to Alex and realized how we share the common goal of preventing illness and death from foodborne pathogens. Ever since that moment, BPI has generously supported STOP and has never asked for anything in return.

That said, one point that needs to be perfectly clear is this: After what I personally experienced watching my son suffer and die, I am very skeptical and cynical about for-profit meat companies and their professed commitment to food safety. Not all companies “walk their talk.” BPI does.

There has been a lot of misinformation swirling around the Internet and on TV about lean beef trim produced by Beef Products, Inc. As I stated earlier, I have personally visited their plant and the categorization of calling their product “pink slime” is completely false and incendiary. Consumers need to understand that this product is meat, period, and that the use of ammonia hydroxide in minute amounts during processing improves the safety of the product and is *commonly used throughout* the food industry. There are many types of interventions including food grade antimicrobial sprays which are used on all manner of foods. Some of these things may sound scary and gross, especially when inaccurately portrayed. These interventions are necessary in ridding meat of deadly pathogens and are required to prove they pose no threats to consumers. Companies would be prohibited by the USDA and FDA to use substances that could be harmful to human consumption.

I am very concerned that mis-categorization campaigns such as the “pink slime” campaign will cause well-intentioned companies such as BPI to cease innovations for developing better food safety technologies and strategies. Why try to do something better only to get set up as a target? If this does in fact happen, and promising technologies get thwarted, we, the American public, will be the losers. And tragedies like Alex will continue to go on and on and on.



“PINK SLIME” LIBEL TO COST THIS COUNTRY JOBS

March 21, 2011

Before last summer, we could not have imagined the personal, professional, financial and spiritual impact of the campaign of lies and deceit that have been waged against our company and the lean beef we produce. But over the last several weeks, that campaign has been joined by entertainment media, talk-show journalists, so-called national news — and all to what end? The clear goal expressed by the campaign organizer — put BPI out of business.

It is simply amazing how this mis-information campaign can take a company and product that has long been recognized for its quality and safety and turn the public perception so negative that it now may result in the loss of over 3,000 jobs (direct employment and companies that rely upon our business) and affected their families and communities.

Our record is unsurpassed. BPI has a foodborne illness been associated with our lean beef for over 30 years. In nearly 300,000,000,000 meals, we have been a recognized leader in food safety by groups such as the International Association for Food Protection. Look at the overwhelming support from food scientists, USDA officials, Consumer Advocate organizations, academia and customers we have received reaffirming the wholesomeness, nutrition and safety of our lean beef (<http://www.beefproducts.com>). But, none of that seems to matter when the campaign has its own agenda.

As the founder of the company, I can personally guarantee that in our 30 year history, we have never produced “pink slime.”

Eldon Roth
Eldon Roth
President & CEO



“It is simply amazing how this mis-information campaign can take a company and product that has long been recognized for its quality and safety and turn the public perception so negative that it now may result in the loss of over 3,000 jobs.”

Eldon Roth
President & CEO



Appendix E

King Urges Vilsack to Help Repair BPI's Image

Washington, DC- Congressman Steve King (R-IA) released the following statement today after sending Agriculture Department Secretary Tom Vilsack a letter expressing concerns about the campaign of misinformation surrounding lean, finely textured beef (LFTB) along with 30 other members.

"Misleading propaganda has plagued the marketplace and is adversely affecting the beef industry," said King. "I hope that Secretary Vilsack will take steps to correct this media driven smear campaign. LFTB is a safe product, and Beef Products Incorporated has an unblemished health and food safety record. This issue impacts every American who buys beef; and they deserve an answer from the Secretary."

The letter co-signers are listed below:

Leonard Boswell (IA-03), Tim Huelskamp (KS-01), Mike Ross (AR-04), Vicky Hartzler (MO-04), Jim Costa (CA-20), Tom Latham (IA-04), Dan Boren (OK-02), Adrian Smith (NE-03), Thomas Rooney (FL-16), Lynn Jenkins (KS- 02), Mac Thornberry (TX-13), Larry Buschon (IN-08), Kristi Noem (SD-At Large), Kay Granger (TX-12), Michael K. Conaway (TX-11), Mike Pompeo (KS-04), Blaine Luetkemeyer (MO-09), Sam Graves (MO-06), Tom Graves (GA-09), Francisco Canseco (TX-2 3), John R. Carter (TX-31), Billy Long (MO-07), Steve Womack (AR-03), Renee Ellmers (NC-02), Randy Neugebauer (TX-19), Joe Barton (TX-06), Robert Schilling (IL-17), Mike Simpson (ID-02), and Bill Johnson (OH-6)

[Letter to Secretary Vilsack](#)

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