

Editors' Note

This *Choices* issue contains a theme set of three articles examining the impacts of the “pink slime” incident on the food and agricultural sectors. There are also three submitted articles—including one policy issue article on implementing dietary goals and guidelines by Palma and Knutson; one on trade distorting impacts of the U.S. Renewable Fuel Standards, by Yano, Blandford and Surry; and one on the shifting to developing countries of productivity growth in global agriculture, by Fuglie and Wang.

In addition to these peer-reviewed articles, Ahearn and Shoemaker provide an article based on an interview with Dr. Sonny Ramaswamy, Director of USDA's National Institute of Food and Agriculture. The subject is the critical issue of adequately funding the research and education system which has substantially contributed to making the United States the competitive force it has been in supplying food security worldwide in recent decades.

Emerging economies are ramping up funding to increase productivity-enhancing research and education, while the United States has been dismantling its system which has long been the envy of the world. Concerned about this trend, the President's Council of Advisors on Science and Technology last month issued *A Report to the President on Agricultural Preparedness and the Agriculture Research Enterprise*. The *Report* calls for increased public investment in agricultural research to enable creation of an “innovation ecosystem for agriculture” that combines public and private R&D efforts. Dr. Ramaswamy has some important messages for policy makers and all those concerned with maintaining U.S. agriculture's productivity growth to enable the United States to continue its role as a major contributor to food security as the world's population expands and demand increases for higher quality diets from developing country consumers with growing incomes.

The article by Fuglie and Wang provides significant supporting information related to Dr. Ramaswamy's insights. Based on a series of case studies, they find that while crop yield growth rates for some of the major grains started slowing during the 1970s, total factor productivity for the global agricultural sector as a whole does not appear to be slowing. In developed economies, the public investment declines in agricultural R&D have been in part offset by growth in private sector investment to keep productivity growing. But continuing growth in private R&D cannot be relied upon indefinitely, without increased public investment to open up new technological opportunities for commercialization. For developing countries, yield growth continues across a broad range of crop and livestock commodities and the sector total factor productivity is quite robust, although large variations exist across countries and regions. Rising productivity in these countries has been supported by policy and institutional changes, improved infrastructure, and particularly increases in public investment in research and development and the dissemination of new technologies and practices. The declining importance of staple food commodities vs. a broader array of food commodity crops, fruits and vegetables, and livestock products means that productivity must continue to increase across a broad array of commodities to provide future food security needed for societal well being. An important challenge is to raise productivity in low-performing countries and regions, especially sub-Saharan Africa.

We trust that the collection of articles in this *Choices* issue will add to your understanding of some important challenges facing agriculture and the food sector.

Theme Overview: Pink Slime, Marketing, Uncertainty, and Risk in the 24 Hour News Cycle

J. Ross Pruitt and Joshua D. Detre

JEL Classification: M31, Q13, Q18

Keywords: Agricultural Commodities, LFTB, Marketing, Risk, Social Media, Uncertainty

Social media has revolutionized the way that individuals interact with each other and the way firms purchase products. Chiefly, it allows the rapid exchange of information that is not necessarily fact checked. While companies and industries benefit from the rapid exchange of information when it creates positive press, negative press highlighting nonfactual information can be disastrous. The agricultural sector is no exception; great difficulty exists in educating consumers, particularly as it relates to the agricultural supply chain. For example, nearly a year after the original story on lean finely textured beef (LFTB) or “pink slime” was broadcast on ABC News, the topic is still circulating on Twitter. Contributing to this phenomena are the combination of social media and lack of consumer understanding on scientific testing procedures for food and the underlying production process (International Food Information Council Foundation, 2009; Greene, 2012). The articles in this theme deal with the uncertainty and risk now faced by the agricultural community because of the prevalence of social media.

A lack of transparency at various levels of the agricultural supply chain contributed to the public backlash against the inclusion of LFTB in a variety of outlets from quick service restaurants to retail grocery stores to the national school lunch program. Renewed consumer interest in the food production practices in recent years is likely a factor in the negative public reaction to the original ABC news stories in March, 2012 even though the information had been publicly available since 2008 (Andrews, 2012).

Articles in this Theme:

Assessing the Impact of LFTB in the Beef Cattle Industry

Did the “Pink Slime” Controversy Influence Publicly Traded Agribusiness Companies

Pink Slime and the Legal History of Food Disparagement

This renewed interest is perhaps driven by the recent influx of documentaries surrounding the agricultural sector and widespread reporting of food borne illnesses. The growth in farmers’ markets, locavores, and interest in organic and naturally produced foods in recent years may have benefitted from the same factors. Although there is no clear evidence of nutritional benefit to organic and/or naturally produced foods relative to conventionally produced foods (Smith-Spangler et al., 2012), agriculture is fighting an uphill battle in consumer food education.

The debate on food production practices did not start with LFTB, nor will it end with it, but social media will certainly be a future battlefield where consumers’ food preferences and opinion on food and agricultural production practices will be shaped. Fewer U.S. citizens have basic knowledge of agricultural production practices, and often are more accepting of traditional and new media sources as their main source of information. Additionally, food and its level of safety is an emotional topic, and opinions and statements about it are often not science based.

In this series of articles, Pruitt and Anderson explore short and long-term adjustments to the U.S. cattle industry and determine that because of reduced demand for LFTB, more efficient use of existing beef supplies will be needed. Changes in relative prices could have dietary impacts highlighted in previous editions of *Choices*. Labeling of LFTB would have improved the information available to consumers, but context is still needed for consumers to fully understand labeling efforts.

Of importance to agribusiness companies is the effect such negative publicity can have on their financials. Detre and Gunderson examine how the “pink slime” issue has influenced short-term financial performance and stock value of publicly traded companies involved. Although BPI, Inc. is not a publicly traded company, several publicly traded companies including, but not limited to, Kroger’s (grocery store) and McDonald’s (restaurant), have said they will no longer use the LFTB product. Some companies such as Tyson (food manufacturer) and Wal-Mart have indicated they would offer consumers products with and without LFTB, and even more have remained silent about the issue. Approximately 70% of the ground beef supply contains LFTB. This article highlights the extent of the market’s reaction across the various sectors of the agricultural supply chain.

In mid-September, Beef Products, Inc. (BPI) filed a \$1.2 billion lawsuit against ABC News, former USDA employees interviewed by ABC News, and a former BPI executive in South Dakota, accusing the defendants of defamation and product disparagement as part of the LFTB case. This is not the first high profile case involving segments of the food industry. Eckley and McEowen provide a brief discussion of the previous media coverage of food production practices and resulting changes in the legal code resulting from efforts to protect

producers and processors. As the legal process is just beginning, the Meatingplace LFTB News Center (2012) may be viewed for the latest updates regarding court proceedings.

The use of the moniker “pink slime” is an example of how calling into question the safety and/or quality of a food product/production practice can do irreparable damage to the faith in the U.S. agricultural supply chain. As prices and markets continue to adjust due to the inability of ground beef suppliers to use LFTB, consumers are paying more per pound for ground beef. The LFTB case has impacts beyond the market price of ground beef, especially for the employees of BPI who lost their jobs and the communities who benefitted from the presence of BPI. While it is not yet clear if longer-term adjustments to the beef cattle industry will be tied back to the media scare over LFTB, it is evident that educating consumers about food production is a challenge not to be ignored. These articles provide a starting point for understanding the need for transparency in the agricultural supply chain and especially for consumer education.

For More Information

Andrews, J. (2012, April 9). BPI and ‘pink slime’: A timeline. *Food Safety News*. Available online: http://www.foodsafetynews.com/2012/04/bpi-and-pink-slime-a-timeline/?utm_source=newsletter&utm_medium=email&utm_campaign=120409.

Greene, J.L. (2012, April). *Lean finely textured beef: The “pink slime” controversy*. Washington, DC: Congressional Research Service R42473. Available online: <http://www.fas.org/sgp/crs/misc/R42473.pdf>.

International Food Information Council Foundation. (2009). Questions and answers about ammonium hydroxide use in

food production. Available online: http://www.foodinsight.org/Resources/Detail.aspx?topic=Questions_and_Answers_about_Ammonium_Hydroxide_Use_in_Food_Production.

Meatingplace LFTB News Center. (2012, March 8). Meatingplace.com. Available online: <http://meatm.ag/lftbcenter>.

Smith-Spangler, C., Brandeau, M.L., Hunter, G.E., Bavinger, J.C., Pearson, M., Eschbach, P.J., Sundaram, V., Liu, H., Schirmer, P., Stave, C., Olkin, I., and Bravata, D.M. (2012). Are organic foods safer or healthier than conventional alternatives? A systematic review. *Annals of Internal Medicine* 157(5),348-366.

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Assessing the Impact of LFTB in the Beef Cattle Industry

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JEL Classification: Q11, Q13, and Q18

Keywords: Beef Cattle, Food Processing, Lean Finely Textured Beef

Ground beef consumption in the United States accounts for over half of total beef consumption and is included in a variety of products from tacos to chili to hamburgers (Greene 2012; National Cattlemen's Beef Association 2009, 2012; Peel, 2012). The importance of ground beef to U.S. consumers is reflected in the number of restaurants that include hamburgers on their menus as well as the different types of hamburgers offered. Despite the slow economic recovery that has been occurring over the past few years, quick-service restaurants focusing on serving quality hamburgers have been expanding across the country. This is in addition to better known chains such as McDonald's and Wendy's periodically updating their hamburger offerings to boost sales which reflects the latest trends present among consumers.

Although ground beef consumption accounts for over half of total beef consumption, it accounts for approximately a quarter of the beef produced from each steer or heifer carcass (Nold, 2012) and a much larger percentage of harvested cows. Additional ground beef is produced by grinding primal chuck and round cuts, but these are more expensive. Compared to the 1970s, domestic beef demand dropped as consumer demand shifted toward leaner protein sources, namely chicken. Although the number of cattle in the U.S. has declined since the 1970s, increased efficiency has contributed to an increase in total U.S. beef production. The primary source of lean ground beef is not from feedlot finished cattle, but from mature cows and bulls slaughtered and from imported lean beef trimmings. Supplies of mature cows and bulls are limited compared to feedlot finished cattle, as an average of 6.3 million cows and bulls have been slaughtered under federal inspection annually since 2000 compared to 27.4 million steers and heifers.

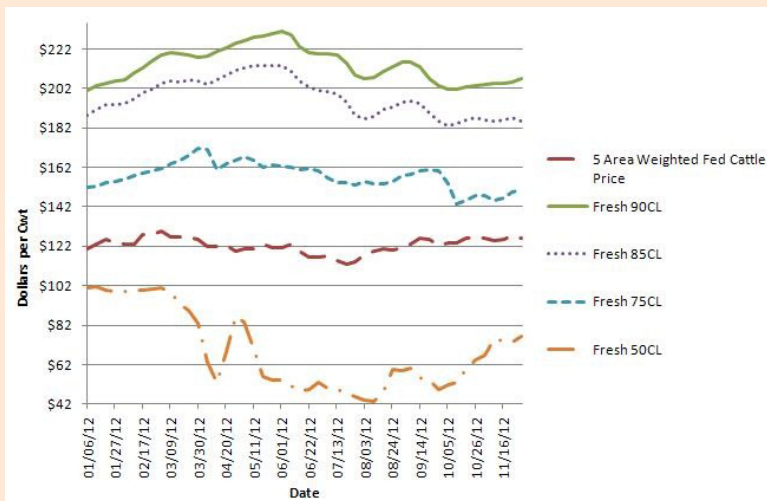
It is in this environment that lean finely textured beef (LFTB) was developed to increase the percent leanness of relatively fatty beef trim—items after removal of major cuts from carcass. The overall value of a beef carcass was increased due to production of LFTB, which allowed consumers to experience near constant prices of products like hamburgers. Following media stories on LFTB, referred to as “pink slime,” in March 2012, consumers rejected the beef product with immediate implications for the U.S. beef supply chain. This article explores the implications for beef markets as a result of the rejection by some consumers and retailers for LFTB. Discussion is also included on industry reaction to the story.

LFTB: The Product

LFTB has been used since the early 1980s (Rabobank, 2012) although the exact product sold by Beef Products Incorporated (BPI), and which was at the center of media and consumer publicity in March 2012, has only existed since 2001 (Andrews, 2012).

Dramatic public backlash against the use of LFTB— or termed “pink slime,” based on wording from a former USDA scientist—occurred following the airing of an ABC News segment on March 7, 2012 (Avila, 2012a), even though there had been other stories on LFTB in previous years (see Andrews, 2012). Consumer concern was almost immediate with ABC News alerting its viewership to which retail outlets carried LFTB in a follow-up story on March 8th (Avila, 2012b). Price impacts were not immediately apparent in the fed cattle futures and cash markets, but weekly prices for 50% chemically lean (CL) trimmings

Figure 1: Weekly Prices for Fed Cattle and Selected Beef Trimmings



Source: USDA AMS; compiled by LMIC

showed a 2% decline in the first week and increased to a 48% drop by mid-April. Fifty percent (50CL) trim prices would stage a short-lived recovery in late April, but the damage in public confidence was too great to overcome.

Through the end of June, lean trimmings (75CL, 81CL, 85CL, and 90CL) held or increased in their value relative to the first week of March, as 50CL trim prices continued to decline. The loss of LFTB acceptance resulted in a large increase in the supply of 50CL.

BPI was not the only company producing a form of LFTB, and production of this beef product by all companies has slowed since the news stories in March 2012. While this story has huge potential ramifications for the entire meat and poultry industry, the drought that has enveloped much of the United States in subsequent months has become the larger story. The impact of the drought on pasture and range conditions combined with rapidly declining yield expectations for corn and soybeans have had a larger impact on fed and feeder cattle prices than LFTB. Regardless, the fallout from the lack of demand

of LFTB reflected in the price for 50CL trimmings continues to lower the value of fed cattle. The decline in demand for 50CL trimmings may be permanent, short of a shift in consumer demand resulting from consumer or retailer re-acceptance of LFTB type products.

Why did the industry adopt LFTB use? Use of LFTB helped to recover approximately 110 pounds of beef trimmings that were less than 50% chemically lean (Rabobank, 2012). Otherwise this product would have been rendered down or would have been incorporated into lower value products on each carcass harvested. The use of 50CL allowed the industry to improve efficiency at the processing level amid a period of declining cattle herd supply in the U.S. and other major beef producing nations. Even though the total U.S. beef herd numbers declined in recent years, total beef supplies had not declined because carcasses were getting larger and the industry was able to more efficiently harvest what was available.

On the consumer demand side, ground beef is typically produced, or ground, into a range of lean-to-fat ratios to meet the requirements

of various retail buyers. The ground beef lean-to-fat ratio typically ranges from 50% lean and 50% fat up to 97% lean and 3% fat. The LFTB process allowed lean beef to be taken out of trimmings that contain a high percentage of fat. Extracted LFTB, approaching 100% lean beef, can be blended with other beef to increase the percentage lean which consumers continue to demand.

LFTB never accounts for more than 15% of a ground beef mixture comprised of lean trimmings that range from 94 to 97% chemical lean (94CL, 97CL). Using ground beef in combination with LFTB results in a desired percentage lean ground beef offering to consumers. Table 1 illustrates prices which affect the formation of an 85% lean-15% fat ground beef mixture with and without the inclusion of LFTB. The beef trim prices are reflective of prices at the wholesale level in mid-February 2012, and indicate savings that can be passed on to consumers.

The cost savings from use of LFTB in ground beef mixtures may not be large, but helps to explain why an estimated 75% of hamburger patties sold in the United States contained LFTB by mid-2008 (Shin, 2008). In the intensely competitive hamburger market, where margins are razor thin and profits often measured in fractions of a penny, these cost savings are extremely important.

Consequences of an LFTB-Free Marketplace

The inability to use LFTB in ground beef mixtures has not dampened the U.S. consumers' appetite for products requiring ground beef. Sources of lean ground beef are still needed due to U.S. consumer preferences for lean beef. As a result of some consumers and retailers unwillingness to accept LFTB, 13 pounds of beef per animal are no longer being used for human consumption (Cross, 2012). This meat did not disappear, but is

Table 1: Fed Cattle and Selected Beef Trimmings, Weekly Prices (\$/cwt.)

Example Price Comparison of Ground Beef Mixture with and without Inclusion of LFTB		
	Ground Beef with LFTB included	Ground Beef without LFTB
Percent Usage of 90CL Ground Beef Trim	75%	87.5%
90CL Ground Beef Trim Price (\$/cwt)	\$212.28	\$212.28
Percent Usage of 50CL Ground Beef Trim	15%	12.5%
50CL Ground Beef Trim Price (\$/cwt)	\$99.84	\$99.84
Percent Leanness of LFTB	95%	N/A
Percent Usage of LFTB	10%	N/A
LFTB Price (\$/cwt)	\$174.00	N/A
Percent Leanness of Ground Beef Mixture	85%	85%
Ground Beef Mixture Price (\$/cwt)	\$191.59	\$198.23
Source: USDA AMS and industry contact USDA prices for the week ending February 18, 2012; prices for LFTB for mid-February 2012		

being incorporated into lower value products and thus reducing the overall value of cattle to producers.

The processes used in production of LFTB are an illustration of the disassembly process involved in transforming cattle into beef and, ultimately, steaks, roasts, and ground beef (Robb, Lawrence, and Rosa, 2006). Consumer beef demand rests on these products, as beef demand is an aggregation of the demand for each of those products consumers eat such as roasts, ground beef, and steaks. Technologies such as LFTB increased the supply of recoverable lean beef from fat trimmings, allowing for lower priced beef at the retail counter and cattle there were higher in value at the farm gate.

Cross (2012) and Rabobank (2012) argue that the inability to use LFTB will result in the need for an additional 1 to 1.5 million cattle to be slaughtered annually. Loss of the LFTB production process creates an inability to efficiently use all the products available from beef carcasses. An additional 1 million cattle slaughtered would result in more steaks, roasts, and other beef cuts also being produced along with ground beef, which would reduce prices for these beef cuts and the overall value of cattle at the farm gate.

Lack of consumer acceptance of LFTB opens the door to development of technologies that can efficiently harvest all available beef on each animal slaughtered. Without the use of LFTB, more 90CL trim from mature cows and bulls will be needed to increase the leanness of ground beef when mixed with 50CL trim (Peel, 2012). Supplies of 90CL trim come primarily from mature cows and bulls which accounts for approximately 20% of Federally Inspected cattle slaughter. Domestic supplies of 90CL trim are expected to continue tightening in the next few years as the U.S. cattle herd shifts from contraction to expansion resulting in fewer mature cows and bulls going to slaughter.

Not all of the 90CL trim though will come from domestic sources. Additional supplies of 90CL trim will come from a variety of sources including U.S. cattle producers, slaughter cow imports from Canada, and frozen beef imported from Australia and New Zealand. At this point, the question is which source will be quickest to respond and at the lowest cost to consumers in this competitive market?

Regardless of the source of the beef, indications are that the concern over LFTB has led to the U.S. importing more beef. This is not trivial, given the increased interest among some U.S. consumers for locally produced food.

In early April, 2012, imports of Canadian slaughter cows and bulls began to increase, partially in response to the inability of U.S. processors to continue to use LFTB in ground beef mixtures.

The increase in cattle imports was likely to occur, given price trends, even without the loss of LFTB, but certainly imports have increased from the negative press coverage surrounding LFTB. Year-to-date imports from Canada are on pace to provide approximately 200,000 head of mature cows and bulls.

Imported lean beef trimmings from Australia and New Zealand can also fill the void in an LFTB-free marketplace, but not without its own set of challenges. Imports from these countries are typically frozen, which work better in the hotel and restaurant industries due to the lack of mandatory country-of-origin labeling (mCOOL) required for retail grocery sales. Additionally, frozen processing beef is more difficult to use in retail packaging due to the increased liquid that results when frozen product is thawed, thereby increasing the chances of leaky packages (Rabobank, 2012). Through May of 2012, U.S. imports of Australian beef trim have increased 85% over last year. The strengthening of the Australian dollar relative to the U.S. dollar during this time period cannot be ignored, but frozen 90CL trimmings from Australia and New Zealand have been trading at a discount to U.S. frozen 90CL trimmings for every month in 2012. The fact that fresh U.S. beef trimmings (90CL) continue to trade at a premium to imported frozen trimmings of similar leanness indicates that the frozen imported product is not a perfect substitute for fresh product.

Lessons Learned

The issue of LFTB further illustrates the divide in perception of consumers and agricultural producers. Consumers generally find agricultural producers to be credible, hence the recent push by farm organizations to have producers “tell their story” and the development of public relation programs such as the Masters of Beef Advocacy by the National Cattlemen’s Beef Association to help combat misinformation.

While there is room in today’s marketplace for a variety of production methods, consumer knowledge about processing practices used to convert a raw food commodity into the desired food product is lacking. Part of the backlash against LFTB was the use of beef previously rendered into nonfood products and use of ammonium hydroxide to prevent the risk of *E. coli* and other pathogen contamination. Critics of the way the beef industry and USDA handled media coverage have argued products containing LFTB should have been labeled as such (Ray and Schaefer, 2012; Lean Beef or Pink Slime? It’s All in a Name, USA Today, April 2012).

Questions remain as to what part and to what extent LFTB should have been labeled: low value beef trim being incorporated into higher value beef trim or the fact that ammonium hydroxide was used to kill *E. coli* and other pathogens? The former has large implications for any meat or poultry product that is ground while the latter has consequences for products ranging from meat to bakery products to confectionery (Greene, 2012). Ammonium hydroxide is widely used as a processing aid in a variety of food products and the Food and Drug Administration views ammonium hydroxide as generally recognized as safe (International Food Information Council Foundation, 2009; Greene, 2012). The use of ammonium hydroxide in LFTB was as a processing aid, and not as an ingredient, which is not required to be labeled per the Food Safety Inspection Service.

Transparency through labeling can reduce information asymmetry, especially at a time when an increasing number of consumers are further and further removed from the realities of agricultural production. However, the effectiveness of transparency is limited when emotions are involved, as is often the case with food

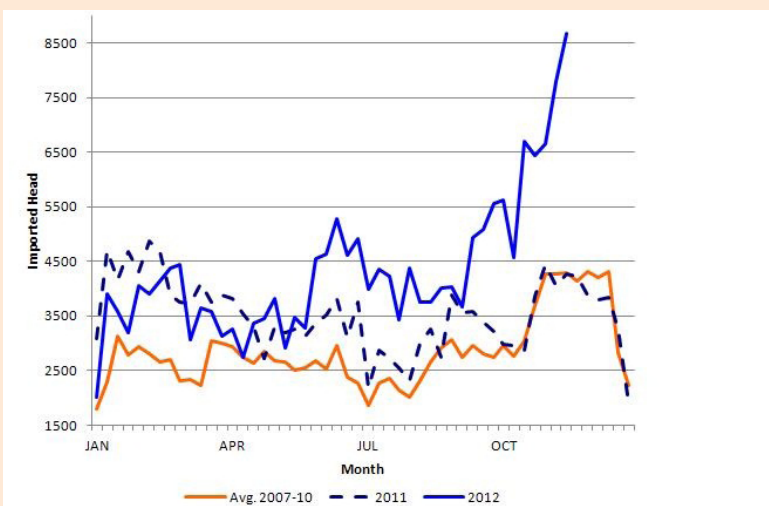
production and food safety. Increased transparency would provide consumers with increased knowledge of food production practices, and reduce the “yuck” factor, but there is no guarantee that consumer exposure will eventually lead to consumer acceptance.

Lusk and Briggeman (2009) found that consumers considered food safety the most important of eleven attributes tested. Gimmicky names such as “pink slime” call into question the safety of a product, which can undermine consumer confidence in the attributes of safety, nutrition and taste which were ranked highly by consumers in Lusk and Briggeman (2009).

Social media and the internet have removed a curtain that often separated production agriculture from the average U.S. consumer and ushered in additional opportunities for transparency and for consumer education. Consumers may be more knowledgeable about production practices that are used, but that is not the same as knowing why a practice is employed. The “why” is no less an important question to ask and present to diminish asymmetric information, but it doesn’t always easily translate into a 140 character tweet or blog post. Too much information can also be detrimental if not completely understood or without the proper context. Arguably, the stories by Avila (2012a, b) lacked context due to the repeated use of the pejorative “pink slime” and failure to highlight how LFTB made more efficient use of available domestic lean beef supplies.

Following the timeline set forth by Andrews (2012) demonstrates that opponents of LFTB had been slowly building a case for labeling or removal of LFTB from the food supply since at least 2008. Entities that are not happy with current production practices in modern agriculture have learned to target public opinion. Use of outlets such as the documentary “Food, Inc.” and the New York Times targeted

Figure 2: Weekly Slaughter Cows and Bulls Imported from Canada



Source: USDA AMS and APHIS; compiled by LMIC

opinion setters. However, public outcry over LFTB did not gain strength until traditional media such as ABC News and other outlets covered the story (Fielding et al., 2012). At that point, no amount of transparency could prevent the downfall of LFTB.

Proponents of transparency in modern agricultural production practices must also remember that while exposure to certain practices may increase consumer acceptance, previous research has shown that “why” doesn’t always matter in the consumer thought process (Lusk, Norwood, and Pruitt, 2006; Tonsor, Olynk, and Wolf, 2009). In both studies, consumers were provided different levels of information prior to completing a questionnaire, only to find that the level of information presented did not lead to differences in results. However, Tonsor, Olynk, and Wolf (2009) found that labeling of pork raised from gestation crates would improve societal welfare more than a ban on gestation crates in pork production. This suggests the possibility that USDA’s action to approve labeling for LFTB to increase transparency was correct.

Summary

Norwood (2007) found consumers do realize the impact of their purchasing decisions on aspects of the agricultural supply chain. However, the consequences of those decisions are not always immediately felt. Longer-run price adjustments often result as marketing intermediaries, recognizing income and substitution effects, are reluctant to pass additional costs to the consumer immediately. In the case of LFTB, consumers continue to demand lean ground beef. The majority of ground beef product previously used in LFTB is still being used and consumed as ground beef, but now in a manner that is more expensive and increases costs to consumers and reduces returns to producers. Cost increases such as these are reflective of

changes in the underlying production practices. The changes that occur may result in smaller producers exiting the industry due to an inability to capture efficiencies from alternative available technology or the ability to afford the technology.

Another issue may be the name of the product itself. Lean finely textured beef, LFTB, is beef. The descriptors of this beef product do provide the opportunity for individuals to know what it is. Alternatively without sufficient transparency, a product can be rebranded into something seemingly sinister.

The media did no favors to consumers by presenting an unbalanced LFTB story. Consumers are intelligent, but intelligence is different from being knowledgeable. Research that has focused on hot topic animal agriculture issues has not determined the extent of the knowledge base of consumers. This may provide an information void pertaining to their knowledge of what agricultural practices are used, by more importantly why certain practices are used. Knowledge on the “why” may not have made a difference in the case of LFTB, but this can provide a lesson to agriculture related consumer education needs. Providing an improved understanding to consumer’s relating to production practices used at the farm or processing level will help them more reliably assess information provided by the media and other sources.

Labeling and bans on LFTB have been discussed. Labeling provides a degree of information and transparency, but without background knowledge may mislead consumers. Without an educated public, bans could have unintended negative effects on societal welfare, as opposed to the desired result of being welfare-enhancing. The outrage expressed by consumers over LFTB resulted in ABC News providing a lesson for production agriculture that the public must be both educated and informed.

For More Information

- Andrews, J. (2012, April 9). BPI and ‘pink slime’: A timeline. *Food Safety News*. Available online: http://www.foodsafetynews.com/2012/04/bpi-and-pink-slime-a-timeline/?utm_source=newsletter&utm_medium=email&utm_campaign=120409.
- Avila, J. (2012a, March 7). 70 percent of ground beef at supermarkets contains ‘pink slime’. *ABC News*. Available online: <http://abcnews.go.com/blogs/headlines/2012/03/70-percent-of-ground-beef-at-supermarkets-contains-pink-slime/>.
- Avila, J. (2012b, March 8). Is pink slime in the beef at your grocery store? *ABC News*. Available online: <http://abcnews.go.com/blogs/headlines/2012/03/is-pink-slime-in-the-beef-at-your-grocery-store/>.
- Cross, R. (2012, April 1). Opposing view: LFTB is 100% beef [Editorial]. *USA Today*. Available online: <http://www.usatoday.com/news/opinion/story/2012-04-01/lean-finely-textured-beef/53933754/1>.
- Fielding, M., Friedland, D., Gabbett, R.J., Johnston, T. and Keefe, L.M. (2012, May). *SLIMED what the hell happened*. Meatingplace. Available online: www.meatingplace.com/Print/Archives/Details/4162.
- Greene, J.L. (2012, April). *Lean finely textured beef: The “pink slime” controversy*. Washington, DC: Congressional Research Service R42473. Available online: <http://www.fas.org/sgp/crs/misc/R42473.pdf>.
- International Food Information Council Foundation. (2009). Questions and answers about ammonium hydroxide use in food production. Available online: <http://www.foodinsight.org/Resources/Detail>.

- aspx?topic=Questions_and_Answers_about_Ammonium_Hydroxide_Use_in_Food_Production.
- Lean beef or pink slime? It's all in a name [Editorial]. (2012, April 1). *USA Today*. Available online: <http://www.usatoday.com/news/opinion/editorials/story/2012-04-01/pink-slime-lean-beef/53933770/1>.
- Lusk, J.L., and Briggeman, B.C. (2009). Food values. *American Journal of Agricultural Economics*, 91(1),184-196.
- Lusk, J.L., Norwood, F.B., and Pruitt, J.R. (2006). Consumer demand for a ban on antibiotic drug Use in pork production. *American Journal of Agricultural Economics*, 88(4),1015-1033.
- National Cattlemen's Beef Association. (2012, August). *Average annual per capita consumption, beef cuts and ground beef*. Available online: <http://www.beefusa.org/CMDocs/BeefUSA/Resources/Statistics/averageannualpercapitaconsumptionbeefcutsandgroundbeef559.pdf>.
- National Cattlemen's Beef Association. (2009, May). *Beef market at a glance*. Available online: http://www.beefusa.org/CMDocs/BeefUSA/Resources/Statistics/factsheet_beefmarketataglance.pdf.
- Nold, R. (2012, January 2). *How much meat can you expect from a fed steer?* Brookings, SD: South Dakota State University Extension. Available online: <http://igrow.org/livestock/beef/how-much-meat-can-you-expect-from-a-fed-steer/>.
- Norwood, F.B. (2007, November 26). lessons abound on animal welfare issue. *The Voice of Agriculture-American Farm Bureau*.
- Peel, D.S. (2012). Getting what you asked for and not liking what you get. *Cow/Calf Corner Newsletter*; April 2.
- Rabobank. (2012, July). LFTB: Beef's latest battleground for survival.
- Ray, D.E., and Schaffer, H.D. (2012). Pink slime: An object lesson for the meat industry? University of Tennessee Agricultural Policy Analysis Center. Available online: <http://www.agpolicy.org/weekcol/611.html>.
- Robb, J.G., Lawrence, A.E., and Rosa, E.L. (2006). *Issues related to beef traceability: A discussion of transforming cattle into products*. Lakewood, CO: Livestock Marketing Information Center. Available online: <http://www.lmic.info>.
- Shin, A. (2008, June 12). Engineering a safer burger. *Washington Post*, p. D-1.
- Tonsor, G.T., Olynk, N., and Wolf, C. (2009). Consumer preferences for animal welfare attributes: The case of gestation crates. *Journal of Agricultural and Applied Economics*, 41(3), 713-730.

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Did the “Pink Slime” Controversy Influence Publicly Traded Agribusiness Companies

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Keywords: Agribusiness, LFTB, Pink Slime, Stock Returns

On March 7, 2012, ABC News aired a report on the use of lean, finely textured beef (LFTB), or “pink slime” as its reporters dubbed it. Although this was not the first time LFTB had been the subject of negative criticism on a national scale, the attention is no longer just coming from traditional media outlets (television, radio, and newspaper), but also from social media sources (Facebook, blogs, and Twitter). Of particular importance is the influence this reaction has had on the financial performance of agribusiness firms in the food supply chain. If image is everything and perception is reality, particularly as it relates to food safety, then agribusiness firms might be in for some challenges. Food and agribusiness firms will need to be prepared to react every time a food safety issue receives attention in social media irrespective of how these images and perceptions are generated.

As early as 2008, the documentary *Food, Inc.* provided many Americans with their first exposure to LFTB. In December 2009, the *New York Times* questioned the technology for producing LFTB, particularly the safety of the ammonium hydroxide process (Moss, 2009). The next major mention of LFTB occurred in April 2011, when chef and TV personality of the television show “*Food Revolution*”, Jamie Oliver, blasted the production process. His rant was witnessed by approximately 5.4 million viewers. Oliver, a celebrity chef and food activist, criticized the process used by Beef Products Incorporated (BPI), when he placed beef trimmings in a washing machine and doused them with an ammonia-cleaning product so he could demonstrate his perception to consumers of what they were consuming. Many of those viewers took to their blogs and twitter accounts to condemn the process, based upon Oliver’s

actions that night. The “Oliver event” might be deemed ground zero as it relates to LFTB and agribusiness; it marks one of the largest uses of social media to condemn a food practice determined to be safe by the United States Department of Agriculture (USDA). Agribusiness companies, particularly fast food companies known for their use of ground beef, took notice. McDonald’s, Burger King, and Taco Bell responded to the “Oliver event” by indicating through company media releases that they would no longer be using LFTB in their products. Both Burger King and McDonald’s indicated their decision to remove Beef Products Incorporated (BPI) beef—the seller of LFTB—from their lists of suppliers of ground meat had nothing to do with the “Oliver event” and everything to do with keeping with corporate strategy. The “Oliver event” should serve as a lesson that the tension between the food supply chain and its consumers will likely increase as consumers are further removed from agriculture and the processes needed to ensure a safe food supply.

The report from ABC News (Avila, 2012) created a flurry of activity along the food supply chain. First on March 15, 2012, the USDA announced it would allow school districts the option of excluding ground beef containing LFTB from its food program. Approximately two weeks after ABC News’s initial report, retail grocery stores issued statements on the use of LFTB in their ground beef offerings. Some publicly traded companies indicated they never offered ground beef that contained LFTB—for example, Whole Foods and Costco; others such as Kroger, Safeway, and SuperValu indicated that they would no longer offer ground beef that included LFTB, and Wal-Mart indicated that it would give its consumers a choice between ground

beef with and without LFTB. This list is not inclusive, as there were also many privately owned grocery chains that made similar declarations about LFTB. The commonality between the public and private companies was that they all seemingly affirmed their belief in the safety of LFTB, but were responding to the market demand for ground beef that did not contain LFTB. The announcements did not stop with the grocery sector, as Wendy's and Red Robin each issued statements saying they had never used LFTB, McDonald's reiterated that it had long since removed LFTB from its ground beef, and Tyson announced that it would make accommodations for customers who did not want LFTB in their ground beef (Bartlein and Geller, 2012; Food Safety News, 2012). At the same time the restaurant industry was making its statement on LFTB, three of the largest packaged food companies in the United States—ConAgra Foods Inc. (Chef Boyardee, Slim Jim, and Hebrew National), Sara Lee Corp. (Jimmy Dean, Ball Park, and Hillshire Farm), and Kraft Foods (Oscar Mayer)—each announced that none of their products contained LFTB.

Because public and private companies in the retail food supply chain create value only by satisfying their consumers' needs and wants, they must satisfy those demands. In the LFTB case, the decline in demand resulting from negative publicity led to a loss of revenue for its producers. This loss in business had a devastating effect on BPI. On March 25, 2012, BPI announced the suspension of operations in its Iowa, Kansas, and Texas plants, which reduced the production of LFTB by 900,000 lbs. a day and left the jobs of 650 people in limbo. Following BPI's announcement, AFA Foods, a ground beef processing company, declared bankruptcy and cited media coverage surrounding "pink slime" as the cause for a significant decline in demand for its products. Although firms reacted to demand,

there is relatively little research related to what extent these reactions are warranted. Therefore, the decision-makers of the firms located in the retail food supply chain cannot accurately judge how consumers will react to these pressures. That is, should they announce that they are removing a potentially safe product from their offerings, do nothing at all, or offer their customers a choice? If the market readily values these practices, then those food companies and agribusinesses that have not made statements about LFTB would be wise to do so. If the market does not value either knowing if a company is going to remove LFTB from its offerings and/or offer alternatives, those managers who have reacted to the aforementioned pressures may have acted prematurely. Thus, this article aims to assess how different reactions of publicly traded food supply agribusiness firms—restaurants, grocery stores, and food processors—to the ABC News report on LFTB influenced the market's assessment of that firm.

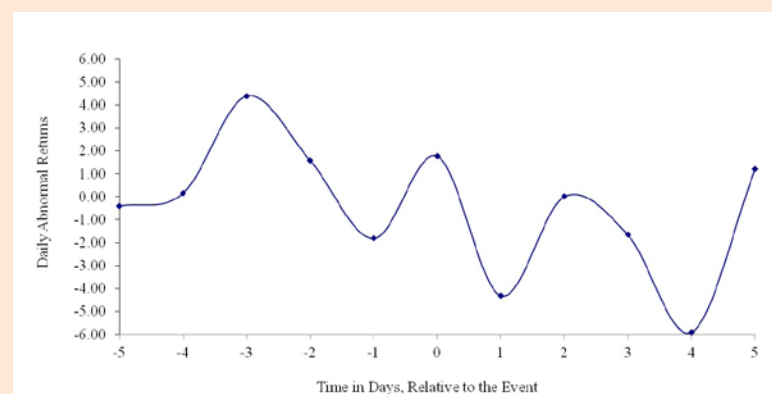
Short-term Impacts

Using the previously mentioned publicly traded food supply companies who issued statements regarding LFTB, excluding Burger King because its stock was taken off the New York Stock Exchange (NYSE) in 2010 and only returned in 2012, we employ the event study methodology to assess the

short-term impact of the ABC News report on firm value. By examining stock price behavior around the announcement of an event, we can begin to understand the influence it has on shareholder value (Binder, 1998). A market model (Ordinary Least Squares (OLS)) is estimated by regressing stock returns for a firm on the rate of return for the market for 250 days surrounding the LFTB event (Armitage, 1995). This allows for the identification of abnormal returns during the event period—dates surrounding the event window. The event window involves small intervals surrounding and including the event date. In particular, the two-day event window is used because the event can be determined with certainty (Armitage, 1995). We utilize an 11-day event window, which begins 5 days prior to the announcement date to account for information leakage (Senchack and Starks, 1993).

Results of the event study analysis show no statistical significance for the average abnormal returns for the tested publicly traded food supply agribusiness firms' share values on the day the report aired on ABC, nor for any of the 5 days before or after the airing of the report. Figure 1 contains a graphical representation of the daily average abnormal returns during the 11-day event window. The lack of significance indicates that the ABC News report, at least in the short-run,

Figure 1: Daily Abnormal Returns



had no influence (positive or negative) on agribusiness returns for any single day in the 11-day event window—the returns behaved as if there had been no report by ABC News. In particular, this means investors, at least in the short-run, did not feel that the LFTB event would influence the agribusinesses' abilities to continue to generate profit in a manner consistent with recent history.

Cumulative abnormal returns allow us to capture the reaction of returns to the agribusinesses over a specified period, relative to the event—ABC News's report on LFTB, which is important because the market may not react instantaneously, nor at the same time for each agribusiness firm. Figure 2 contains the graph of cumulative returns for the [-5, +5] window. When we look at cumulative abnormal returns for the estimation window, we observe no significant effect. The longer announcement window allows the analysis to capture reactions by agribusiness firms to the report, but is not so long as to allow outside influences unrelated to the event to affect share prices. It is interesting that the agribusinesses in this study issued media releases stating that their products did not contain LFTB, they would remove products with LFTB from their menus, and/or they would offer alternative products that did not contain LFTB. Thus, over the days subsequent to the ABC

report, those agribusinesses issuing media releases hoped that they would have an influence on investors. If the hope was that these releases would boost share value, the announcements were not effective; however, if they were to prevent negative public reaction, they could be deemed successful, as these firms did not experience statistically significant negative cumulative abnormal returns.

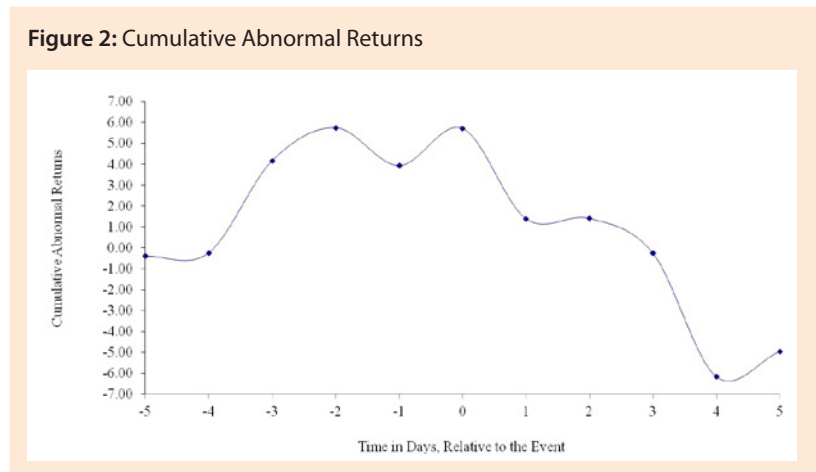
Medium-term Impacts

While the event study measures short-term market reaction to an unexpected event, it does not capture the medium- and long-term effects an event can have on a company. For the LFTB event, the time elapsed has not been sufficient to measure these effects which will require analysis of several quarters of the aforementioned firms' financial statements. In particular, ratio analysis can provide useful insight into the influence of LFTB. Cash flow per share is not only a good predictor of a firm's financial stability and financial health, but it is much more difficult for companies to manipulate than earnings per share (EPS). The second financial ratio, return on equity (ROE) measures a firm's profitability. ROE is defined as net income divided by average stockholder's equity and measures how effectively the stockholder's investment is being used to produce profit.

If firms begin to experience a decline in cash flow per share, it likely reflects the first signs the firms are dealing with rising prices of ground beef. McDonald's, Yum Brands, and Red Robin—large users of ground beef companies that have said they do not use LFTB in their ground beef—must now operate in a market where other firms and entities are no longer using and/or are offering alternatives to LFTB—for example, the USDA. The removal of LFTB from the ground beef supply chain means that the available supply of lean beef has declined, which in turn has caused an increase in lean beef prices and this ultimately reduces cash for some agribusinesses. For a detailed discussion of the LFTB event impact on the U.S. beef supply, see the Pruitt and Anderson article in this issue of *Choices*.

When examining ROE, declines are typically caused by either decreasing or stagnating firm earnings, which can be attributed to increasing costs and/or lost sales. Thus, for the aforementioned firms it will be crucial to examine how much their ground beef procurement costs have changed and the proportion of these costs to the firm's total costs. It is likely that those firms that operate in the retail sector as opposed to the processing and manufacturing sectors will be the first to feel the initial effects of rising beef prices first from the loss of LFTB. These costs are likely to be higher than they otherwise would be, in part due to cattle inventory in the U.S. being at its lowest level in more than 60 years thanks to record high corn prices and droughts in states that produce much of the U.S. beef cattle. While cost management from the supply side is extremely important, agribusinesses are more concerned about consumers purchasing their products; otherwise, cost control measures are irrelevant. Loss of sales can have a devastating impact on financial performance, because if people quit eating at a restaurant or purchasing meat

Figure 2: Cumulative Abnormal Returns



from a grocery store, ROE will go down. To get a more complete picture of the effects of the removal of LFTB from a company's ground beef supply and its ultimate influence on ROE, it will require making earnings comparisons between companies that utilize LFTB and those that do not over a longer time span. Such analysis will allow determination of whether consumers really demand LFTB-free ground beef or are they content with ground beef that contains LFTB.

Implications for the Future

As the safety of the food supply chain continues to be debated in social media, it will likely become commonplace for agribusiness to react to these debates. This reaction may be in the form of media releases or the removal of products that are proven safe by USDA standards but condemned by the general public because of a lack of understanding the standards. The results from this analysis show that, in the short-term, the market put no value on the pink slime event, as share prices exhibited no abnormal returns. This means that shareholders are unsure whether or not removing LFTB from an agribusiness firm's offerings will provide the firm with any long-term competitive advantage relative to those that do remove LFTB. In light of the non-reaction in the market in the short-run, it is tempting to say that agribusinesses should not have reacted to public outcries against agribusiness companies; however, we do not fully understand what the medium- to long-term impacts of the pink slime event will be. Consequently, we cannot say whether those firms that reacted immediately will see long-term benefits that outweigh their increases in costs—higher prices of ground beef. To be able to understand the long-term influence of removing LFTB from the beef supply will require a detailed analysis of subsequent quarters of the financials

for companies that have and have not removed LFTB from their offerings. While BPI has suffered as the primary producer of LFTB, the final impact on agribusinesses and the retail food-supply chain is not yet known. However, what is evident is that agribusiness will likely need to develop strategic management plans for monitoring and reacting to the social media landscape as it relates to consumer food production.

For More Information

Armitage, S. (1995). Event study methods and evidence on their performance. *Journal of Economic Surveys*, 9(1), 25–52.

Avila, J. (2012, March 7). 70 percent of ground beef at supermarkets contains 'pink slime'. *ABC News*. Available online: <http://abcnews.go.com/blogs/headlines/2012/03/70-percent-of-ground-beef-at-supermarkets-contains-pink-slime/>.

Bartlein, L. and Geller, M. (March 30, 2012). Wendy's jumps into "Pink Slime" public relations war. *Reuters*, Available online: <http://www.reuters.com/article/2012/03/30/us-food-slime-idUSBRE82T1F120120330>.

Binder, J.J. (1998). The event study methodology since 1969. *Review of Quantitative Finance and Accounting*, 11(2), 111–137.

Food Safety News. (September 17, 2012). BPI and pink slime: An updated timeline. *Food Safety News*, Available online: <http://www.foodsafetynews.com/2012/09/bpi-and-pink-slime-an-updated-timeline>.

Moss, M. (October 3, 2009). The burger that shattered her life. *The New York Times*, Available online: http://www.nytimes.com/2009/10/04/health/04meat.html?pagewanted=all&_r=0.

Pruitt, J.R., and Anderson, D.P. (2012). Assessing the impact of LFTB in the beef cattle industry. *Choices*, this issue.

Senchack, A.J., and Starks, L.T. (1993). Short-sale restrictions and market reaction to short-interest announcements. *Journal of Financial and Quantitative Analysis*, 28(2), 177–194. Author Affiliations

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Pink Slime and the Legal History of Food Disparagement

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Keywords: Lean Finely Textured Beef, SLAPP, Agricultural Business Disparagement, Defamation

The current “pink-slime” controversy over the unlabeled use of “lean finely textured beef” (LFTB) in more than 75% of the nation’s hamburgers, including within the federal school lunch program, is not a new phenomenon. Over the last 25 years there have been several news stories regarding issues in the nation-wide food chain that have garnered significant traction with the public and adversely affected some agricultural industries for a period of time.

Alar

The first was the “Alar” scare affecting the apple industry. In 1989, the CBS news program, “60 Minutes,” reported on a 1989 report of the Natural Resources Defense Council (NRDC) stating that children faced increased dangers from pesticide use such as Alar, which was applied to apples. The report was supported by scientific research and had been preceded by consumer concerns and boycotts three years earlier. Washington apple growers were adversely affected when consumers stopped buying apples in reaction to the story. The growers sued the NRDC, CBS and CBS affiliates carrying the broadcast in the state of Washington. The case, *Auwil v. Columbia Broadcasting System* was dismissed because the growers were not able to prove the broadcast statements were false. 67 F.3d 816 (9th Cir. 1995).

As a result of the Alar incident and the apple industry’s lack of legal recourse for its losses, the food industry was successful in passing specific food disparagement laws in Alabama, Arizona, Colorado, Florida, Georgia, Idaho, Louisiana, Mississippi, North Dakota, Ohio, Oklahoma, South Dakota and Texas. These laws were meant to protect producers of perishable food from the effects of false

statements. These statutes are sometimes referred to as “veggie-libel” laws. The agricultural industry successfully argued that the Alar case demonstrated that common law defamation and product disparagement claims did not adequately address the vulnerable nature of the industry because perishable food items could spoil before false or misleading information could be corrected and transmitted out to the public. Due to this vulnerability, food producers needed their own laws and lucrative remedies.

The statutes vary slightly from state to state, but typically provide liability to the producers of the product for damages and “any other appropriate relief” if:

- (1) a person disseminates information to the public relating to a perishable food product, which is “a food product of agriculture or aquaculture that is sold or distributed in a form that will perish or decay beyond marketability within a limited period of time.”;
- (2) the person knows the information is false; and
- (3) the information states or implies that the perishable food product is not safe for consumption by the public.

Most of the statutes require an ill-intent by the person disseminating the untruthful information rather than mere negligence in disseminating information that turns out to be based on something other than scientific facts or reliable data.

Mad Cow in Beef Supplies

The first well-publicized legal test for these new laws came in 1998. Oprah Winfrey aired an episode on April 16, 1996, in which she expressed concern regarding the prevalence of

bovine spongiform encephalopathy (BSE) or “mad cow disease” in the United States. Ms. Winfrey was sued by a cattle producer in Texas under the new food disparagement law in the case *Texas Beef Group v. Winfrey*. 11 F. Supp. 2d 858 (N.D. Tex. 1998). Of concern were several statements made during the show, including “this disease could make AIDS look like the common cold”; “14% of all cows are ground up, turned into feed and fed back to other animals”, and Ms. Winfrey’s comment that “it has just stopped me cold from eating another burger.”

Following the broadcast, April live cattle futures contracts on the Chicago Mercantile Exchange dropped the then daily allowable limit of \$1.50 per hundred pounds. Cash prices for fed cattle also dropped during the two weeks following the airing of the show. The case was not actually tried under Texas’ food disparagement law because the court granted the defendants’ judgment as a matter of law on all claims except the business disparagement claim.

In deciding whether a claim had been presented on Texas’ food disparagement law, the court held that fed cattle are not “perishable” and their product was not a food product that would perish or decay beyond marketability within a limited period of time as required under the state’s law. The court also held that the plaintiffs failed to prove false statements were made or that the defendants knew the statements were false during the broadcast, which was another requirement for recovery under the law. The remaining claim for business disparagement was decided by a jury in Ms. Winfrey’s favor because there was no proof the statements were made deliberately and with malice.

The common law action for business disparagement generally requires the plaintiff to prove:

- (1) the statement was communicated or published to a third person;

- (2) the statement played a material and substantial part in inducing others not to deal with the plaintiff;

- (3) the statement was false; and

- (4) the defendant acted with wrongful intent or malice.

Some courts also require proof that the publication of the statement caused harm, that the harm was intended or that the defendant knew the statement was false but published the statement in reckless disregard of its truth or falsity.

The district court’s decision that the beef producers could not prove their food disparagement claim was appealed to the Fifth Circuit Court of Appeals. The district court’s opinion was affirmed because of the lack of proof of any false statements, but the court declined to review the issue of whether live cattle were perishable as defined by the statute. A concurring opinion argued the food disparagement law was meant to provide protection for cattle farmers and ranchers as well as producers of food items like apples. The judge noted that cattle begin to diminish in value once they have passed their marketable weight and the claim should have been remanded for trial to determine whether the plaintiff could prove the cattle’s value decayed “beyond marketability.” The judge noted that the law meant to distinguish between perishable products and “highly processed foods.”

Lean Finely Textured Beef

The public outcry against LFTB was fierce, but not immediate. On December 30, 2009, the *New York Times* ran an article in which the process, safety issues, and prevalence of LFTB in the food supply were raised. The article relied on email communications from Gerald Zirnstein, a former United States Department of Agriculture scientist whose opinion was that the approval process was flawed. Mr.

Zirnstein’s internal emails were obtained via a Freedom of Information Act request. One of Mr. Zirnstein’s emails is from where the term “pink slime” originated. There was little public outcry from the article.

On April 12, 2011, a national celebrity-chef Jamie Oliver ran a segment in which he replicated his imagined version of the processing of LFTB using common household items, including a washing machine and a bottle of ammonia. Mr. Oliver’s primary purpose was to educate viewers that LFTB was prevalent in the school lunch program, which was the general topic of his network show. In February 2012, McDonald’s, Taco Bell, and Burger King announced they would no longer use LFTB in their products.

Following an announcement that a large quantity of LFTB was purchased for school lunches, a petition on the on-line website “Change.org” was posted on March 6, 2012 and garnered more than 250,000 signatures of support in three weeks. On March 7, 2012, ABC News reported that 70% of the ground beef in supermarkets contained LFTB. On March 15, 2012, the USDA affirmed the safety of LFTB, but allowed each school lunch program to decide whether it would allow LFTB to be used. Throughout the remainder of March 2012, nation-wide supermarket chains announced that they would discontinue selling products containing LFTB or provide labeled options for consumers. By the end of March, Beef Products, Inc. (BPI), the largest producer of LFTB suspended operations at three of its four locations. Beef packers were also experiencing significant financial losses from the controversy.

By the end of March, governors from beef producing states joined with Secretary of Agriculture Thomas Vilsack to calm the public and assure the safety of the product. By the first part of April, the USDA had approved

requests to voluntarily label products containing LFTB. Further, a survey was released on April 5, 2012, finding 88% of U.S. adults were aware of LFTB and 76% expressed some concern with the product.

Current Lawsuit

On September 13, 2012, Beef Products, Inc. sued ABC News, broadcast newscasters, former USDA scientists, and a former BPI executive turned whistle-blower in a 263 page petition. In the case titled, *Beef Products, Inc. v. American Broadcasting Companies, Inc.*, BPI makes defamation, product disparagement, defamation by false implications, defamation by implication, product disparagement by implication, violation of South Dakota's Agricultural Food Products Disparagement Act, S.D.C.L. § 20-10A-1 *et seq.*, and tortious interference with business relations claims. Damages sought, according to the petition, are actual damages of \$400 million, treble damages and punitive damages. News reports have pegged the claimed damages at \$1.2 billion. On October 24, 2012, the defendants moved to transfer the state case to federal court based on diversity jurisdiction. The defendants promptly filed a motion in federal court to dismiss the lawsuit. There has not yet been any ruling on the motion to dismiss.

Common Law Claims for Defamation, Product Disparagement, and Tortious Interference with Business

BPI claims the ABC News broadcast in which it was reported that 70% of the ground beef in grocery stores contained LFTB caused consumers to demand that grocery stores stop carrying ground beef in which LFTB was

present and for which they had no knowledge of its presence. As a result of the public's knowledge of the use LFTB, most national grocery chains refused to sell the product or sell it without labeling it. BPI also claims the news reports caused significant financial harm to the company and caused the layoff of more than 650 employees in three factories that were forced to shut down due to the decrease in demand.

In order to succeed on their defamation claims, BPI will have to show that the information reported was actually false, was not an opinion, and that there was actual knowledge of the falsity. In addition, BPI may have to show that there was ill intent on the part of the news organization to do harm. BPI's petition alleges that ill motive and that the news organization knew its stories were false can be proven by the fact that BPI and industry representatives sent letters and public relations videos, fact sheets, and articles to the defendants that the defendants ignored. In reviewing a motion to dismiss, the court will review the petition and consider all allegations made by BPI as true. Only if the stated allegations fail to prove all elements of the claim will the court dismiss the claim. Courts do not often dismiss cases at this early stage, so it is possible that one or more of these claims could survive the initial motion to dismiss if the judge decides the petition sufficiently alleges statements provided by the news organization lack truthfulness and the news organization was aware it was presenting untruthful information.

In the *Winfrey* case, the court did not dismiss the food disparagement, negligence, or defamation claims until after all evidence discovery had been completed. The allegations and statements within the news reports, however, appear to fall somewhere between the Alar case in which there was a scientific report and years of controversy prior to the report and

the *Winfrey* case in which a lot of the "defamatory" statements complained of appeared to be a little sensational and more like stated opinions rather than facts. One or more of these claims will likely be BPI's best chance for overcoming a motion to dismiss the case and possibly summary judgment.

South Dakota's Food Disparagement Law

South Dakota's food disparagement statute contains many similar elements that must be proven by BPI. BPI will likely face an uphill battle on proving some of these elements.

The first problem for BPI is similar to the one faced by the cattleman in the district court in Texas. It must prove it produces an "agricultural food product," as defined by South Dakota's law, S.D.C.L. § 20-10A, defining it as a food product sold or distributed in a form that will "perish" or "decay beyond marketability" within a period of time.

BPI's own petition describes the process by which LFTB is produced. The refrigerated beef trimmings are heated to 105 degrees, spun through two centrifuges where the lean meat is separated from the fat, the lean meat is then treated with ammonia gas, and the final product is flash-frozen as it runs through the systems and machinery designed by BPI. In the *Winfrey* case, the Texas district court held that live fed cattle were not agricultural food products because they were not perishable or had not decayed beyond marketability. If the South Dakota district court considers this issue in reviewing the state food disparagement claim, there is debate as to how the court will classify a heated, processed, and flash-frozen product run through a series of systems and machinery. Whether the product is perishable or subject to decay beyond marketability within a short period of time, as required by the statute, is certainly a question

both sides can vigorously argue. The court, however, may do well to avoid deciding this issue altogether and focus, instead on the statements made by the defendants.

The second big obstacle for BPI is whether ABC News and the remaining defendants disparaged LFTB, as defined by the statute. The statute requires that the defendants knew the information they reported was false and that they stated or implied that an agricultural food product is not safe for consumption by the public. Further, in order to recover treble damages, BPI must show that the defendants had an intention to harm BPI when they disparaged the product. In the *Winfrey* case, the Fifth Circuit held that the facts of that particular lawsuit showed that there was no proof of false statements or knowledge of false statements.

Also, BPI's claims arise out of the loss of revenue it incurred when the demand for its product dropped. Whether the demand dropped due to public concerns regarding the safety of the product or due to the public's disgust with the idea of the product and the lack of transparency of its widespread use throughout the food industry may generate an interesting question. In *Winfrey*, the issue was clearly the safety of the beef supply, but for BPI it must demonstrate that the decrease in demand for its product was caused by reports regarding the safety of the product rather than a lack of public knowledge of how LFTB is produced and a lack of labeling. BPI may not be able to prove that the statements implied LFTB was unsafe, as required under the law.

There is little legal precedent interpreting food disparagement laws. In the BPI case, it is possible the court could conclude that LFTB is not an agricultural food product that falls within the protections of the statute. But, it seems more likely the court will follow the guidance of the Fifth Circuit and decide the

issue on the lack of knowledge by the defendants regarding the falsity of the statements. With the previously published accounts of LFTB by the *New York Times* and the primary issue raised by the news reports being the prevalence of the product in the food system without the public's knowledge, it seems most likely the court will be able to make this determination alone.

First Amendment Issues

The First Amendment of the United States Constitution promises that "Congress shall make no law... abridging the freedom of speech, or of the press..." This amendment applies to states through the Fourteenth Amendment. In the *Winfrey* case, the district court held that the subject of the speech, which was the safety of the United States' beef supply, was an issue of legitimate public concern, so the court reviewed the speech under the strictest standards in evaluating First Amendment protections of speech.

One of the most widely debated concerns with food product disparagement and defamation claims against news reports of food is the concern that the lawsuits are brought to chill speech and are violative of news organizations' and individuals' first amendment rights. South Dakota's food disparagement law requires BPI prove the defendants knew the information was false, which is similar to the Texas statute at issue in the *Winfrey* case.

Some online accounts have classified this lawsuit as a "SLAPP" suit. SLAPP stands for a strategic lawsuit against public participation. SLAPP lawsuits are not brought by plaintiffs with an expectation to win the suit, but are meant to intimidate criticism of their product, company, or political view either through the legal process itself or the mounting costs of litigating the long and complicated claims. The most common claims are

typically defamation, business interference, and conspiracy, which can be difficult to defend as these generally engender many factual questions which are not resolved in pre-trial motions. Several states have enacted statutes to protect against these types of abusive lawsuits, but South Dakota does not have any statutory protections against SLAPP.

Whether a lawsuit is actually a SLAPP suit is a question of fact for the judge or jury to decide, but without any statute to apply in the current case, this determination will not be made. It is important to note, however, that with the passage of food disparagement laws and others, such as laws that make it illegal to videotape an animal producer's operation recently enacted in some states, the agricultural industry is not afraid to bring suit against news reports that adversely affect their business. The cost to media and other organizations in defending these suits could begin to have a stifling effect, if these types of lawsuits become more commonplace.

Future of Pink Slime Litigation

Despite several instances prior to Spring 2012, the pink slime debate did not gain traction in the media or with the public until ABC News covered the process and its largely unknown prevalence in the United States' ground beef supply. While the public outrage seems to have died down for the time being, the legal process is just beginning. Previous cases arising out of food disparagement claims have not been successful for the parties that brought the suit. It is unlikely there will be a much different outcome in this lawsuit. The debate as to whether BPI's product will forever be "pink slime" is in the lawyer's hands now.

For More Information:

Auvil v. Columbia Broadcasting System, 67 F.3d 816 (9th Cir. 1995), aff'g 800 F. Supp. 928 (E.D. Wash. 1992).

Beef Products, Inc. v. American Broadcasting Companies, Inc., No. 12-292 (S.D. Cir.), petition filed Sept. 13, 2012. Available online: <http://www.beefisbeef.com/2012/09/13/defamation-claim>.

Beef Products, Inc. (2012), Collection of industry viewpoint of controversy and additional articles. available online: www.beefisbeef.com

Engler v. Winfrey, 201 F.3d 680 (5th Cir. 2000).

McEowen, R. and Harl, N. (Spring 2012). *Principles of Agricultural Law*. Eugene, OR : Agricultural Law Press, 11-8 to 11-10.

Moss, M. (2009, December 31). Safety of Beef Processing Method is Questioned. *The New York Times*.

Texas Beef Group v. Winfrey, 11 F. Supp. 2d 858 (N.D. Tex. 1998).

Timeline of LFTB. available online: <http://www.marketingandtechnology.com/repository/webFeatures/Meatingplace/lftbtimeline.html> (April 12, 2011). Maybe L.A. Was a Mistake. [Episode 201]. *Jamie Oliver's Food Revolution: American Broadcasting Company*.

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