Summary

This case study presents a debatable issue regarding lean finely textured beef (LFTB) also known as pink slime. Students would find this case study interesting, relevant, and informative, because consumers have increasingly become more concerned about quality, safety, and health of food products. In addition to summarizing the pertinent historical issues, this case study also presents two contradicting views and arguments about LFTB vs. pink slime, addressed by the beef industry and other food critics. Most importantly, this case study also presents how the nation's leading fast food restaurants changed their major purchasing practices, not because of government regulations, but rather from increased pressure from consumers. Students learn the important role of social media tools in today's technological environment. This case study also aims to have students compare and analyze different public relations strategies, especially managing negative publicity with particular reference to food safety.

Learning Outcomes

The goal of this case study is to promote students' learning by reflecting on various dilemmas relating to LFTB vs. Pink Slime. Students should be aware that there are increasing concerns and debatable issues about this topic in terms of health, quality, and safety. Several desirable learning outcomes are expected from this case study. Here are some examples:

Students are expected to learn how this controversial issue encourages restaurant companies to take different approaches and actions. They will be able to:

- Define the controversial term and issue between lean finely textured beef (LFTB) and pink slime.
- Understand how perceived risk and food safety differs, depending on different customer segments, and how these factors influence customer perceptions of quality.
- Review the historical issue of LFTB vs. pink slime and evaluate the role of electronic word of mouth (e-wom) in spreading the term, pink slime.
- Analyze both positives and negatives of using LFTB for restaurant establishments, (including independent and multi-unit restaurants) in terms of costs and quality perceptions.
- Interpret different approaches and actions that different restaurant companies have taken to enhance brand image and increase loyal customers.
- Evaluate the effective use of social media in increasing awareness of LFTB and in changing consumer attitudes and actual dining behaviors.
- Reflect on the negative publicity surrounding this topic, and analyze how the restaurant industry and beef industry have adopted and implemented different risk communication and promotional strategies to counteract this negative publicity.

Disucssion Questions

What are your own and/or general consumers' concerns regarding the safety, quality, and health of LFTB vs. pink slime? Do you feel that consumers are overreacting to the issues? What are your perceived risks after learning about this topic from both arguments (beef industry vs. food activists including Jamie Oliver)?

Instructors need to highlight that food critics questioned quality and safety of LFTB while the meat industry and its related associations argue that LFTB, in fact is safe without compromising nutrition. Some students may be bothered by the use of ammonium hydroxide in producing the LFTB, while some students may agree with views that LFTB is healthy, compared to other regular meat trimmings because it is a lean product. Instructors may assign readings of this case study and ask for students' opinions. Alternatively, instructors can show brief video clips to support the use of and/or the banning of LFTB and ask for responses.

What are the roles of social media to increase awareness of LFTB and change attitude and actual behaviors? Why do you believe Jamie Oliver's Stop Pink Slime was so successful and reached many consumers?

The controversy of pink slime vs. LFTB clearly shows how consumers' perceptions and electronic word-of-mouth (e-wom) can influence success or failure of a company. As written in the case study, Jamie Oliver's Food Revolution (StopPink Slime) has been spread widely via e-wom. This is an excellent example of how social media can reach so many people internationally and swiftly. For example, one of his youtube clips has been viewed by more than 1.4 million users. Instructors may ask students to think of different roles of social media, and ask how their attitude and behaviors have been changed, after viewing one or more clips presenting different campaigns.

Do you think the issue of LFTB changed your attitude and impacts your behavior selecting particular restaurants?

Students' responses would vary, depending on their individual characteristics. It would be interesting for instructors to have open discussions with students. The author, for example, used the class's poll, using a short online survey tool to represent aggregated opinions, depending on gender, health preference, and level of perceived risks. Students' opinions are likely to change, depending on which campaign clips they watched. It is important for instructors to balance showing both perspectives StopPink Slime (banning LFTB) and Beef is Beef campaigns (supporting the use of LFTB).

Why do you think major fast food restaurants, including Mc-

Donald's, Burger King, and Taco Bell, discontinued using the LFTB product, even when U.S. health officials approved it?

As shown in Table 1 (case study), FDA approved food grade ammonium hydroxide as safe for human consumption approximately 40 years ago, and FDA and USDA in 2001 approved BPI's pH enhancement system to treat lean beef with ammonium hydroxide as a way to eliminate pathogens. McDonald's used LFTB in its hamburgers, starting in2004, followed by other major hamburger chains, but major fast food restaurants decided to ban LFTB, including McDonald's, Burger King, and Taco Bell, due to pressures from customers. Instructors also would include other examples of major supermarkets banning LFTB. Students would find this question interesting, because decisions by these major players have made huge differences in purchasing costs. Most interestingly, their decisions were not influenced by federal or state regulations but by customer pressures, which were articulated on and via different social media networks.

After reading this case study, what are your perceptions about the relationship between food safety and quality of food? To enhance food safety, sometimes some procedures add chemicals or food additives to food products. What are your views relating to food safety vs. food quality? What relationships do you observe? One of the arguments from the beef industry is that the use of ammonium was necessary to improve food safety, since this ingredient could remove e-coli and salmonella, and the small amount of ammonium is safe. What do you think of this argument?

It would be interesting for instructors to ask students' reviews relating to food safety vs. food quality. Instructors can show findings from the 2012 Food & Health Survey: Consumer Attitudes toward Food Safety, Nutrition, and Health, conducted by International Food information Council Foundation to highlight general consumers' perceptions about food additives, food quality, and food safety. Food safety is known to be one of the most important attributes of food quality. Food critics argue that the use of pink slime is unacceptable to high quality standards, and criticize that pink slime is not really beef, but rather an additive and filler. On the other hand, the meat industry and its related associations strongly decry those criticisms, saying instead that LFTB product is 100% beef in every aspect from quality to nutrition. More, they argue that ammonium hydroxide enhances food safety, because it kills pathogens. It would be interesting to think of the role of food safety in evaluating food quality. The International Food Information Council (IFIC) and U.S. Food and Drug Administration (FDA) published a document explaining food ingredients and food additives, along with maintaining a list of over 3000 ingredients in the its data base, called "Everything added to food in the United States" (www.fda.gov/Food/FoodIngredientsPackaging/). The instructors can discuss how additives are approved for use in foods and the role of the modern technology in producing food additives.

The producer of LFTB, Beef Products Inc., together with the American Meat Institute, engaged in various public relations strategies to stop the public and USDA scientists from calling the LFTB pink slime, arguing "our product is 100% beef in every regard, from quality to nutrition." Does it seem a valid argument to you? Would you agree that this is a valid argument to you? Why or why not?

Students' responses are likely to vary. Many students may be aware of the issue addressed by Jamie Oliver or other food critics supporting the ban of pink slime, but some students may be unfamiliar with different views from other side. Instructors should present several factual and promotional video clips, produced by the American Meat Institute and Beef Products Inc to educate students on these other views.

Do you feel that some fast food restaurants' reputations were damaged by this controversy? You learned how Wendy's and Red Robin, who never used the product, reacted to the problems. What would you have done differently to protect the restaurant's brand image and reputation?

The case study includes some business examples how several restaurants have responded to this controversy. Since most medias discuss that major brands such as Wendy's, McD, and BK discontinued use of LFTB, starting in early 2012, many consumers incorrectly believe that other brands still use them, considering them of lesser quality, whereas in fact they never had used LFTB. Instructors can show the new advertising messages or reactions from other brands such as Red Robin and Five Guys. Students can share their ideas of how other brands can respond/react to this issue.

What are the benefits and negatives of using this controversial product for your own operations later, if you have the power to order products for your future operations? For example, presume that you are the president or one of the executive management team members operating the multi-unit chain restaurants, where one of the main menu items is the hamburger. What would you have done if your restaurant served burgers, including LFTB, in this controversial time? If you never served the menu items, including the LFTB, what activities and actions you could have done to improve the image?

Many restaurants include burgers as a menu item, and this question encourages students to think of a realistic business problem. Even when restaurants did not use LFTB, some suffered from customers' concerns. Some restaurants took advantage of this controversy, while some are negatively impacted by it.

Suggested Courses: How to respond to questions/ issues

Food Safety

All hospitality programs have a food safety course, and this case study would fit well in such a course. The issue of food safety relating to ground beef has been frequently addressed by the CDC and in other literature, because beef trimmings are known to be more susceptible to contamination than other cuts are. Another hot debate issue has been the use of ammonium hydroxide in processing LFTB, and instructors can address related topics of what other chemicals are commonly used in other processed food, and why food additives are safe to general consumers, and why some food additives may be considered chemical contaminants. The instructors may review history of generally recognized as safe (GRAS) and different types of GRAS from the FDA website.

Many hospitality programs are using the Servsafe textbook, thus this case study can be a complimentary resource, when discussing crisis management in Chapter 10. Rohr et al (2005) argued that effective communication about food risks and safety is highly influenced by the extent to which people perceive the source to be reliable and credible.

The instructors also consider addressing the issue of corporate social responsibility, and how CSR can be actively used as part of implementing crisis management. It should be emphasized that a damaged reputation can influence the company's revenues and bottom lines, especially if it fails to respond adequately to the crisis (Vanhamme & Grobgen, 2008).

Foodservice Cost Control

Purchasing is one of the important foodservice cost control cycles determining the quality and safety standards of products, and often resulting in a company's competitive position. This case study included several examples of how and why the nation's leading fast food restaurants had to change their purchasing suppliers and take action to choose the different products. This case study can be used to understand the important role of establishing quality and pricing for the company's reputation, and why selecting the optimal supplier is also important in impacting the bottom line for the company.

Hospitality Law and Regulation

One of debate issues was why the ingredient of ammonia hydroxide is not declared on the label and why the inclusion of LFTB to the ground beef is not labeled, but could be indicated as 100% beef. Instructors should address when it is not required to declare the ingredient of ammonium. The instructor also should highlight that this applies to other nutrients such as zero trans fats and cholesterol. For example, while 2006 FDA regulations require trans fat to be listed on label, labeling laws allow foods with up to less than half gram trans fat per serving to say "zero grams of trans fat" according to FDA Food and Labeling and Nutrition Regulation (www.fda.gov/food/labelingnutrition). In discussing nutrition labeling issues, the instructors also can present the information written in the FDA Food Safety Modernization Act, highlighting the important role of traceability, and Menu Label Regulation requirements.

Bernues et al. (2003) observed that consumers increasingly want information about the system of production, traceability of animals and products, and the quality controls put in place by the industry. They observed that consumers who are more concerned about safety and health issues tend to generally demand more information about labeling. Instructors may need to highlight how traceability through credible information can be related to perception of quality for certain customer segments.

Hospitality Marketing / Hospitality Strategies

This case study presented several different promotional and marketing efforts to increase general consumers' awareness and to change their attitudes and behaviors. In various ways this case study can be used to enhance students' learning experience. First of all, students can be asked to compare the effectiveness between public relations and advertising. For example, Wendy's selected an option to put ads in various newspapers emphasizing that they never served the product, including LFTB, while Red Robin took a different PR approach, as described in the case study. In particular, this case study can also be used to compare two major campaigns from two different contradicting points of views: Stop Pink Slime (supported by Jamie Oliver and other food activists), and Beef is Beef (supported by the American Meat Institute and beef industry). Alternatively, instructors can focus on comparing and analyzing how two different restaurants have taken different promotional strategies to improve brand image. For example, as presented in the case study, instructors can highlight the fact that Wendy's attempted to put ads in six newspapers reemphasizing that Wendy's never used LFTB. On the other hand, Red Robin restaurants commissioned an online survey study by Harris Interactive about LFTB, and as a result, other media outlets released the stories that Red Robin never used LFTB.

Overall, this case study also can be used as a resource on how risk communication and PR strategies can be addressed and handled. Instructors may consider using Modin and Hansson's study (2011) and presenting their recommendations about seven practical principles for such communication: 1) be honest and open, 2) disclose incentives and conflicts of interest, 3) talk all available relevant knowledge into consideration, 4) when possible, quantify risk, 5) describe and explain uncertainties 6) take all the public's concerns into account, 7) take the rights of individuals and groups seriously.

Table 3

Contradicting Arguments: Stop Pink Slime vs. Beef is Beef Campaigns

Issue	Stop Pink Slime Campaign by Jamie Oliver and other food advocates.	Beef is Beef Campaign by American Meat Institute / Beef Products Inc.
Edible for humans	Beef trimmings were only used for pet food and oil.	While beef trimmings are edible, process separating the lean meat from the fat was previously impossible to accomplish by hand.
Use of ammonium	Ammonium hydroxide is commonly used for cleaning, and has unpleasant odor.	Food-grade ammonium hydroxide is used to prevent bacteria ; Other products such as puddings and baked foods have used this ammonia treatment.
Label / ingredient	Pink slime is not really beef. It's an additive and filler.	LFTB is 100% beef product in every regard from quality to nutrition.
Safety	There were at least 3 incidences where BPI trucks had to be stopped before they got to schools, because E. coli or salmonella was found.	LFTB tests show that all forms of LFTB are safe when produced in compliance with USDA regulation; enhancing food safety.
Production process	The ammonia treatment affects the pH scale of the beef. The pH has been found at 9.5 which is much larger than the normal beef pH of 6.	Innovative food safety process, separating meat from fat in beef trimmings.
Quality / Sustainability	It's not quality beef and is only used as a cheaper version of beef, emphasizing "chemically-treated scrap meat."	All types of LFTB are sustainable products because it is making the most of the resources.
Nutrition	Doesn't have the same value as beef; the trimmings come from a cow that used to be in dog food.	Lean product, without compromising nutrition.
Slogans used	Stop Pink Slime: because we deserve real food.	"Dude, it's beef." And "Beef is Beef"
Costs	Because of the controversy of pink slime, cattle ranchers must have more cows, thus increasing the price of beef.	Cost-effective product (LFTB is less expensive than ordinary meat trimmings).

Teaching Approaches/Supporting Materials

While it is important to present the factual and objective information about this topic, this case study really requires students to use critical thinking processes and problem-solving exercises, because distinctive compelling arguments are presented whether or not the use of LFTB should be supported or disapproved. This case can be used for the different levels of classes, depending on the needs of instructors. Instructors may start asking questions of whether or not students have heard about the topic of LFTB or pink slime to assess awareness of this topic, and then determine what issues they heard about. It is important that instructors should be objective when initially presenting both compelling arguments from the perspectives of beef industry and other critics so that students are not biased by the instructors' opinions. In the large size of some class settings, the students may write a paper, after being given several discussion questions along with two or three articles debating this issue. In a small class setting, this case study also can be used to stimulate group discussions by critiquing each position, support for or against the use of LFTB, and identify problems, since there are two main compelling and contradicting arguments surrounding this topic. Other teaching resources can include:

Video Clips

The instructors can show two short video clips – one highlighting Jamie Oliver's Food Revolution show (http://www.youtube.com/watch?v=RBkwUt-bqIo), and another one, representing the facts about lean finely textured beef, from the American Meat Institute (http://www.youtube.com/watch?v=GDiPjmsKeh8) There are several other interesting video links from the ABC reports and News, representing the issue of LFTB or pink slime in the school cafeterias, fast food restaurants, production process, and responses from the USDA that the instructors can choose to show.

Websites

Students may consider visiting several websites to learn more about this debatable topic, and restaurants addressed in the case study. FDA also has published useful information relating to related regulations. Several examples are:

- Get the facts on lean beef trimmings: http://beefisbeef.com/
- American Meat Institute: http://www.meatami.com/
- FDA's Food Ingredients and Colors – Food Additives: http://www.fda.gov/food/foodingredientspackaging/ucm094211.htm
- FDA's Generally Recognized as Safe (GRAS) Substances Database: http://www.fda.gov/Food/FoodIngredientsPackaging/GenerallyRecognizedasSafeGRAS/default.htm
- Stop Pink Slime: http://www.stoppinkslime.org/
- International Food Information Council Foundation: 2012 Food & Health Survey (consumer attitudes toward food safety, nutrition & health): http://www.foodinsight.org/Content/3840/2012%20IFIC%20Food%20and%20Health%20Survey%20Report%20of%20Findings%20%28for%20website%29.pdf
- Change.org: http://www.change.org/petitions/tell-usda-to-stop-using-pink-slime-in-school-food
- Beef Products, Inc. (the world's leading producer of LFTB): http://www.beefproducts.com/
- Five Guys Burgers and Fries: http://www.fiveguys.com/about-us/faq.aspx
- McDonald's: http://www.mcdonalds.com/us/en/supplierstories.html#/Beef
- Wendy's: http://www.aboutwendys.com/responsibility/
- Red Robin Gourmet Burger: http://www.redrobin.com/about

Communication Messages

Each of the campaigns, advertisements, and PR messages carry different logos, slogans, and messages, which are worthwhile to review and examine. It would be especially interesting to contrast different arguments by showing simple slogans such as "because we deserve Real Food" by Stop Pink Slime campaign and "LFTB is 100% beef" by Beef is Beef campaign. Instructors can utilize Table 3 (from case study) to present contradicting arguments by comparing these competing campaigns.

Additional Reading Materials

Brimer, L. (2004). Chemical food safety, public awareness and risk communication. British Food Journal, 106 (1), 23-37.

Jones, P., Comfort, D. and Hillier, D. (2006). Healthy eating and the UK's major food retailers: A case study in corporate social responsibility. British Food Journal, 108 (10), 838-848.

Jones, P., Comfort, D., Hillier, D. and Eastwood, I. (2005). Corporate social responsibility: A case study of the UK's leading food retailers. British Food Journal, 107 (6), 423-435.

Jones, P., Comfort, D. and Hillier, D. (2005). Corporate social responsibility as a means of marketing with customers within stores: A case study of UK food retailers. Management Research Review, 28 (10), 47-56.

Knight, A. J., Worosz, M. R. and Todd, E. C. D. (2007). Serving food safety: Consumer perceptions of food safety at restaurants. International Journal of contemporary Hospitality Management, 19 (6), 476-784.

Mahon, D. and Cowan, C. (2004). Irish consumers' perception of food safety risk in minced beef. British Food Journal, 106 (4), 301-312.

Modin, P. G. and Hansson, S. O. (2011). Moral and instrumental norms in food risk communication. Journal of Business Ethics, 101, 313-324.

Rijswijk, W. V. and Frewer, L. J. (2008). Consumer perceptions of food quality and safety and their relation to traceability. British Food Journal, 110 (10), 1034-1046.

Redmond, E. C. and Griffith, C. J. (2005). Factors influencing the efficacy of consumer food safety communication. British Food Journal, 107 (7), 484-499.

Vanhamme, J. and Grobben, B. (2008). "Too good to be true!". The effectiveness of CSR history in countering negative publicity. Journal of Business Ethics, 85, 273-283.

Webster, K., Jardine, C., Cash, S. B. and McMullen, L. M. (2010). Risk ranking: Investigating expert and public differences in evaluating food safety hazards. Journal of Food Protection, 73 (10), 1875-1885.