A Rational Look at Lean Finely Textured Beef (a.k.a. Pink Slime)

Depending on whom you listen to or read, Lean Finely Textured Beef (LFTB) is either an unsavory conglomeration of raw materials subjected to harsh chemical treatments or an economical and sustainable beef product with a proven track record of safety and a wide range of utility. The blogosphere, media, and at least one celebrity chef use the derogatory term "pink slime" to describe LFTB. In addition, the photograph most widely used by the media and others is actually a picture of mechanically separated chicken. However, LFTB looks remarkably different. (Picture)

Putting aside all the shrill, it is interesting how the product is made and how it becomes a component in almost 70% of the nation's ground beef supply. For those of you who received USDA commodity ground beef in the past, it was permissible to include LFTBat a rate that would not exceed 15% in any one serving. For 2011, approximately 7.2 million pounds of LFTB were used in the117 million pounds of ground beef that werepurchased by USDA. If you do the math, you can see that not all USDA ground beef suppliers opted to include LFTB in their products.

In an effort to provide more transparency and options for food service operators in response to the concerns raised by parents and others, USDA recently announced that ground beef items without LFTB will be available beginning with purchases for Fall 2012. More details on the transition and purchase options should be available from USDA in the near future.

Let's Examine the Facts about LFTB

LFTB Manufacturing 101: The LFTB manufacturing process involves heating edible high fat content beef trimmings just enough to turn the fat to liquid, but not so high to cook the lean tissue, and then separating the fat from the lean by centrifugal force. The result is 90 percent lean beef, which is then injected with small amounts of ammonium hydroxide to eliminate microorganisms, an important step for food safety. The product is then further processed, packaged and frozen. Essentially, it is not cost effective to pay skilled meat cutters to separate the high-value lean from the lower-value fat on the trimmings. Instead, a safe and efficient process was developed to perform that task with minimal human intervention. In my view, this is progress in the science of food processing.

Food Safety: As the true product name suggests, LFTB is 100% beef—no fillers or other objectionable materials. It is produced instate-of-the-art facilities under USDA inspection. USDA inspectors are present in the facilities where LFTB is produced every day to ensure the product is safe and wholesome. In addition, LFTB is subjected to and must pass an exhaustive battery of microbiological analyses for pathogens and spoilage microorganisms before it is released into commerce. USDA has steadfastly stated that LFTB is a safe, wholesome product. In fact, most of the critics of LFTB have stopped short of questioning the overall safety of the finished product. Not to belabor the point, but there are numerous independent scientific studies that affirm product safety. This includes the use of ammonium hydroxide as an antimicrobial processing aid in the manufacturing process.

Use of Ammonium Hydroxide as an antimicrobial agent: Ammonium Hydroxide has been used to make foods safe since 1974, when the Food and Drug Administration (FDA) declared it

as a “Generally Recognized as Safe” or GRAS compound. The GRAS designation is the highest safety attribution the FDA assigns to chemical compounds. As part of the manufacturing process, boneless lean beef trimmings are subjected to small amounts of ammonium hydroxide to eliminate bacteria safely and effectively. It is important to note that ammonium hydroxide is a naturally occurring compound found in many foods, in our own bodies and the environment. Food safety experts and scientists agree it is an effective way to ensure a safe beef product. The sensational images and assertions that LFTB is washed in the ammonia product used for household cleaning are simply wrong. The International Food Information Council Foundation has a great question and answer page on ammonium hydroxide on their website at: http://www.foodinsight.org/Resources/Detail.aspx?topic=Questions_and_Answers_about_Ammonium_Hydroxide_Use_in_Food_Production

The raw materials used to make LFTB: Several written and broadcast media articles have stated that LFTB is made from heavy connective tissue, “scrapings from the slaughterhouse floor” and “cow intestines.” Nothing could be further from the truth. In fact, LFTB is manufactured from trimmings produced during the fabrication of beef carcasses into the various wholesale cuts (e.g., ribs, loins). The beef trimmings always remain edible for human consumption, are under USDA inspection and could be used in a number of products, if it were not manufactured into LFTB.

Nutritional Value of LFTB: The nutritional value of LFTB is not in dispute. You can judge for yourself. (nutrition facts panel).

The impact of recent events on the cost of ground beef products: In the past, it was generally thought that allowing LFTB in ground beef products reduced overall costs of USDA purchases by about 3 cents a pound. However, given the current price of domestic 90% lean boneless beef(last week’s close was over $2.19 per pound) the price implications for not using LFTB in future purchases will be profound. Given the price sensitivity of food service operations, this could dramatically affect the cost of beef entrees and the number of beef items actually plated. With the price of all domestic protein items rising due to increased exports of U.S. products to emerging middle classes around the world and soaringinput costs and, in the case of beef, shrinking herd sizes, the cost of beef items will continue to increase as more demand is placed on the limited supply of domestic lean trim as less LFTB is used.

Reality or Myth, You make the call: In the end, the decision to include LFTB in purchases of ground beef products should be made based on science and economics, not misinformation and unfounded perception. However, far too often, the facts are being tortured and science hijacked to frighten consumers and create a false crisis or conspiracy. We are living in an age where in-depth “fact checking” by the media is a thing of the past and good people and reputable businesses can be destroyed overnight for the sake of a headline. What food or process will be the next target? That being said, I certainly understand the pressures that amedia uproar can cause for a food service operator. This is all the more reason to do your own “fact checking” before you make final purchasing decisions or respond to your clientele or bosses on this and future media generated issues. It is always best to keep an open mind and engage withimpartial, science-based sourceswhen information is needed.