**Topic: L-Cysteine**

**Relevance to GFF**

In January and June of 2014, the publication UberFacts tweeted from its handle, “Most white bread contains human hair.” The original tweet in January garnered 1,530 retweets and 943 favorites. It was reposted July 10 by the group and received 1,112 retweets and 1,160 favorites. As would be expected, most of the responses were negative. In addition, the comment was posted on Facebook on February 8, 2014, and received 533 likes and 112 shares. Negative comments did not specifically mention L-cysteine.

L-cysteine is classified as a non-essential amino acid and is used as a dough conditioner or strengthener. Major commercial sources of it are Chinese and Indian avian feathers, human hair and hog hair, though it can be synthesized in laboratories.

**Issue at Hand: Industry Transparency**

L-cysteine is sometimes listed on food labels, but does not have to be if it was used to make other ingredients, thereby making it difficult to track how many products actually use it. It should be noted that it has GRAS (Generally Recognized as Safe) status by FDA, and is considered safe when used at suggested levels for dough conditioning.

**Why GFF Should Be Concerned**

While UberFacts (a Web site dedicated to dispensing interesting, funny or surprising facts) has a significant following, it has been criticized for not citing sources and tweeting information that is not factual. In fact, reporters from the website Gizmodo fact-checked 64 tweets and found that 26 were untrue, exaggerated or misleading.

Despite UberFacts not being an influential publication, the material taps into consumer mistrust of the food industry spurred by advocates such as Food Babe and Center for Science in the Public Interest. By creating misleading headlines which cast the food industry in a negative light, these groups mobilize their communities to speak against its products, often without sharing the full picture of context and additional information (e.g., on ingredient sourcing and function).

**Articles of Interest**

**STOP PUTTING HIDDEN MEATS IN VEGETARIAN FOODS: FOOD ACTIVISTS**

NL Times, 8/13/14
This addresses animal ingredients added to foods that are not often listed on the label, including that L-cysteine is often found in bread.

**7 Grossest Things in Your Food**

ABC News, 7/23/14
Unusual ingredients are highlighted, including duck feathers in dough in the form of L-cysteine. The article urges readers to check with manufacturers, eat gluten-free foods or bake their own bread to avoid L-cysteine.

**Jewelry Boxes, Combs, and Mirror Frames Made from Human Hair**

The Huffington Post, 7/22/14
Through the research of a design project, the use of human hair was explored, leading to the discovery of L-cysteine and its use in baking.
Gross Ingredients You Didn't Know Were in Your Food
The Guardian, 5/13/13
Following the horsemeat scandal, other questionable ingredients were brought to light. L-cysteine is listed as an amino acid found in bread. The ingredient is traced to duck and chicken feathers, but most frequently, human hair. The article sources that most hair used to make L-cysteine comes from China, and urges readers to purchase fresh bread in order to avoid the ingredient.

Beetlejuice and Duck Feathers? 7 Grossest Things in Your Food
Prevention, 10/12/12
Ingredients including L-cysteine are highlighted, along with ways to avoid them.

6 Disgusting Things You’re Eating (And You Don’t Even Know It!)
Forbes, 4/3/12
The article highlights natural ingredients approved by the FDA, including L-cysteine, which the article describes as made from human hair. Additionally, the article claims “many commercial types of bread are devoid of nutritional value and contain a ton of sugar.”
Within the 2014 fiscal year, L-Cysteine saw overall consistent coverage, with peaks due to articles featuring often repetitive reports on “unusual ingredients” found in food.
L-Cysteine Mentions (Past Year)

Document Distribution By Date

340 documents From 09/01/2013 to 08/01/2014

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**GFF Holding Statement: L-Cysteine**

GFF’s mission is to educate influencers on the positive nutrition contributions of grain products in the diet — namely through bread products. With increased public scrutiny on food ingredients, labeling and source, ingredients like L-cysteine will only continue to surface as a negative product attribute rather than a positive one — in terms of product look, feel and shelf life. While GFF cannot encourage our baking members to change their product formulas, we can educate audiences on the positive nutrition impact that grain products bring to one’s diet.

**Questions and Answers**

*Why should investors be concerned about L-cysteine?*

Consumers today are demanding increased transparency in food labeling. In addition, the food industry’s use of ingredients that are not only difficult to pronounce but also have multiple industrial purposes has struck a negative health cord that can potentially damage a product’s viability on consumer’s shelves. With L-cysteine, while it is a non-essential amino acid used for baked good performance, the origin of this ingredient stems from Chinese and Indian avian feathers, human hair and hog hair (though it can be synthesized in laboratories).

*How do I get consumers to trust that my products are safe to consume?*

While L-cysteine is only one issue that consumers have brought in as a concern and likely will not be the last, it’s important to highlight grain foods’ nutritional contribution to one’s diet. As a member of GFF, you have the resources on GrainsforYourBrain.org to help educate your customers that grain products are safe to consume and provide nutrients that would be otherwise missed.

*How do I deal with food activists like Food Babe?*

Handling food activists is a dicey endeavor and the communication strategy is different from the one used for an author (like Perlmutter, Davis, etc.). If your business is being specifically attacked, it is recommended that your legal and communications team become involved as more targeted issues action may need to be implemented. Typically, with activists, they want their voice to be the loudest and in the case of Food Babe, her motivation is extortion and profit.

*As a consumer, I believe food advocates like Food Babe. Why should I believe some big corporation that wants to just make money and capitalize on my family’s health?*

Food activists’ main motivations are extortion and profit. Unfortunately, often times, their truths are distorted and pseudo-science is included to further draw out their case. The United States has one of the world’s safest food systems and is highly regulated by the FDA; food companies must comply with their regulations on the use of any food ingredient.
L-Cysteine
With all additives there is an issue of transparency amongst influencers and consumers. Despite L-Cysteine having a GRAS status, this fact does not eliminate the ingredient from public distrust and scrutiny. With the publics having immediate access to pseudoscience that provokes fear, it leads to doubts that the food system is safe and is rather, only about profit.

RESOURCES

GFF Scientific Advisory Board:
- Julie Miller Jones PhD, LN, CNS
- Sylvia Melendez-Klinger, MS, RD, LDN, CPT

Hispanic Food Communications.

Additional Resources:
- AND
- FDA
- IFT

GFF Partners:
- ABA
- CFI
- GMA
- IFIC
- NAMA

Do we have a public position that can be used?

YES
- Positive issue platform
  - Variety
  - Nutrition
  - Health
  - Process
  - Choice
  - Insights
  - Origin

NO
- Holding statement
- Refer to external experts

Document & monitor