

[Click to Print This Page](#)



CATEGORY: INGREDIENTS

Communicating Food Ingredient Safety in a Fear-Driven Environment

By Lindsey Loving

February/March 2012

Despite solid scientific evidence supporting their safety, food ingredients have been the subject of myths and misperceptions for decades. In recent years, however, the increased interest by consumers in “sustainable,” organic and “natural” foods seems to have had an equal and opposite effect on foods perceived to be “processed.”

Perhaps no other aspect of food is more highly associated with processed foods than foods containing “artificial” ingredients.

In addition, the benefits of food ingredients for food safety, nutrition and health are often overlooked, or aren’t even considered. Food ingredients perform a variety of useful functions in foods that are often taken for granted, such as to maintain or improve food safety, freshness and nutritional value and to improve taste, texture and appearance.

Consumer Awareness Is Decreasing

Consumer research on perceptions of processed foods finds that 43 percent of consumers are unfavorable toward this category of foods. Most consumers associate processed foods with containing artificial colors and flavors (76 percent), as well as chemicals with long names (68 percent).^[1]

In addition, there is decreased consumer awareness of the functions and benefits of food ingredients. For example, the 2011 International Food Information Council (IFIC) Foundation Food & Health Survey found that fewer consumers agree that low-calorie sweeteners can play a role in weight loss/management (29 percent) or can be part of an overall healthful diet (24 percent) than in 2010 (38 percent and 29 percent, respectively). At the same time, an increasing percentage of Americans (34 percent) report a lack of knowledge about low-calorie sweeteners compared with previous years (27 percent in 2010).^[2]

Similarly, awareness of functions and regulation of food colors is low. Only one in three Americans agrees that food colors add to the appearance of foods; just over half of consumers are aware that both natural and artificial food colors must be labeled on food packages and nearly half agree that food colors must be reviewed and approved by the U.S. government before being added to food products. However, fewer than one in five consumers thinks that most government and health authorities say there is no link between food colors and hyperactivity in children. This general lack of awareness indicates an opportunity to provide education about the roles, regulation and potential benefits of food ingredients.

Despite concerns and negative sentiments about ingredients and processed foods, when it comes to food and beverage purchase decisions, taste prevails, with 87 percent of consumers ranking taste as an important factor. Foods with a more healthful nutrition profile must still taste good to make it into consumers’ shopping carts. Food ingredients such as low-calorie sweeteners, fat replacers and other ingredients have helped make possible the availability of foods with lower fat, sugar and sodium content to improve the healthfulness of favorite foods, while maintaining the taste consumers expect. Healthfulness is increasing in importance as a factor in consumers’ food purchasing decisions, with 66 percent ranking it as having an impact on their decisions. In addition, these safe ingredients are cost-effective, helping keep food affordable for consumers, 79 percent of whom say price is important in their food and beverage purchases, a 15 percent increase over the past 6 years.

The food label provides information on ingredients for consumers’ use. Nearly half of all consumers say they look at the ingredients list on food packaging when making food and beverage choices. However, they are primarily looking for food components such as sodium, type of fat/oil and sugars. Less than half (44 percent) of those consumers who are looking at the ingredients list report looking for “artificial ingredients,” and only 21 percent look for food colors. Just 18 percent are concerned with being able to pronounce the ingredient names.^[2]

It is important to make the public aware of the availability of information about food ingredients, whether it is on the label or through science-based information on the Internet and in doctors’ offices, or through contacting the U.S. Food and Drug Administration (FDA) or the product manufacturer, all of which can provide information to help consumers make informed decisions.

The Next Frontier: Values-Based Communications

It has always been difficult to translate scientific information for the public, but new challenges—including increased adoption of the precautionary principle, the proliferation of social media, as well as the release of popular books and movies on food-related issues—have added to the complexity, as society reacts to images and hypothetical scenarios that spur fear of the unknown, including what we don’t know about our food.^[3]

With never-ending communications taking place in the blogosphere and online communities, we have seen an increase in information on all fronts, including misinformation, which contributes to conflicting and inconsistent information that is difficult for consumers to interpret. When communicating with consumers about food ingredients, the facts are important, but perhaps equally important these days is the consideration of consumers’ values, lifestyles and beliefs. Food is a very personal thing for consumers, and is usually connected to family and tradition. In particular, moms—who tend to do the majority of the grocery shopping for their households—are concerned with providing safe and nutritious meals for their families.

Foods containing ingredients commonly consumed by children can create anxiety for moms, who want to protect their children and themselves and may not be exposed to both sides of the issue when reading about food ingredients in the

media. For example, there has been renewed interest in the perceived link between consumption of artificial food colors and hyperactivity in children among media and advocacy groups, and in turn, some moms and mommy bloggers. The most recent study to indicate a link[4] has been the basis for the voluntary removal of select artificial food colors in Europe and petitions to remove artificial food colors from the food supply in the United States, despite decades of safe use and significant limitations of the study identified by scientists, academics and regulatory agencies such as the FDA and the European Food Safety Authority (EFSA).[5]

FDA revisits ingredient approvals as necessary and if a concern is raised, as evidenced by its recent review of all existing research on food colors and hyperactivity, in which it upheld its conclusion that food colors do not cause hyperactivity in children.⁶ In addition, FDA and EFSA found the study by McCann et al. (i.e., the Southampton study)[4] to be limited by the methodology used, as well as the combination of colors and additives and the use of anecdotal reports from parents and teachers.⁵ In addition, a study of Irish children showed that daily consumption of food colors did not reach the amounts tested in the Southampton study and that the combination of colors tested would not exist in the real world.[3,7]

The public hears about risks and wants to take action. However, it is important to put studies and perceived risks into context for consumers to avoid unintended consequences, such as eliminating foods and food groups that offer important sources of nutrients, or taking on comparably greater food safety risks. In the case of food colors, some children who have been diagnosed with attention deficit/hyperactivity disorder may be sensitive to certain foods and food ingredients, including food colors. However, this unique intolerance does not indicate a food safety issue and represents a very small portion of the population.⁶ Information about the specific population that may be affected is important for consumers to be able to determine whether there is a risk to them or their family, and if that risk outweighs other risks they may be taking on by changing their consumption.[8]

Telling consumers how they can take control—for example, by reading labels and providing more fruits and vegetables—is helpful, while also preserving choice for those consumers who are not concerned and do not wish to reduce their consumption of food ingredients.

Explaining the similarities and differences between food ingredients and foods that are perceived to be more familiar and therefore safer in consumers' minds can also be effective. For example, every food we eat—even those that are naturally occurring—is made up of chemical compounds that determine flavor, color, texture and nutrient value.[9] Fresh fruits and vegetables are not required to list nutrition and ingredient information, but if they were, the list of chemicals composing them would rival foods containing added ingredients.

Is the Latest Always the Greatest?

Food additives and “generally recognized as safe” (GRAS) ingredients are some of the most studied components of our food supply. However, new studies that dispute the larger body of research are often deemed more credible because they are the latest research on the topic. It is important when looking at food ingredient research to emphasize that, while it may be tempting to view the most recent study as the best and most reliable, this is not always the case.

When communicating a study's findings, it should be placed into the proper context, including acknowledging the limitations of the study, such as:

- The study's original purpose
- Shortcomings in the study's methodology
- Ingredient amounts used
- Sample size
- Application of the findings to a specific subsegment of the population

It is also important to acknowledge what the weight of the evidence tells us, and to recognize past research when a study disputes previous findings.[8]

For example, recent epidemiological studies showing greater overweight or obesity in consumers of low-calorie sweeteners do not demonstrate a cause-and-effect relationship. Other factors that could be contributing to the results should be considered, as well as the original hypothesis/purpose of the study. Many well-done studies conducted have found that consuming low-calorie sweeteners in place of caloric sweeteners can lead to weight loss and/or weight management. A few recent studies on this relationship in mice and rats indicating a link have had small sample sizes and may not be applicable to humans. These studies should be evaluated within the context of the overall body of evidence on this topic.

Our Work Is Never Done

As ingredients and technologies become integrated into the food supply, consumers will continue to have questions about their purpose and safety. Therefore, constant communication about the safety of approved food ingredients is critical to maintaining consumer awareness and confidence. Future generations will not have benefited from educational efforts conducted when the ingredient or technology was new, validating the need for consistency in communication efforts. For example, some consumers have questioned the importance of food processes such as pasteurization and have opted to consume raw milk—which poses clear food safety risks—rather than consume milk that has been “processed.” Education around food processing, its safety and benefits, including the role of food ingredients, will be critical to maintaining the high food safety standards achieved in the U.S.

Communications about food and nutrition must be positive—the Food & Health Survey consistently shows that most Americans would rather hear positive messages about what to eat, rather than negative messages about what not to eat.[2] In addition, communicators must meet consumers where they are (e.g., in online venues) and provide simple, practical tips they can use in their everyday lives. For example:

- Use a low-calorie sweetener in place of sugar in beverage selections to reduce calorie intake throughout the day.
- Enjoy a 100-calorie pack of a favorite snack or dessert to keep portions and calories in check.

Do Science and Emotions Go Together?

In this environment driven by emotions and fear, it will be important to acknowledge concerns and reassure the public of

the safety and efficacy of approved food ingredients, while promptly communicating with the public when a legitimate concern, such as a food safety recall, arises. Equally important, it will be critical to provide consumers with information for them to understand the direct benefits they receive from food ingredients, and tips for how they can incorporate food ingredients into a healthful diet. Too much of anything can have adverse effects; therefore, providing clear, concise information about the food supply and food choices will ensure that consumers can enjoy an abundant variety of safe, good-tasting, healthful and affordable food in a manner that promotes variety and moderation.

As obesity and prevalence of other diseases increase, the safety of food ingredients, and other aspects of our food, will continue to be questioned regarding their role in our health. Our food supply is safer than ever before; however, there is always opportunity for improvement. Regulators, scientists, academicians and industry stakeholders should continue to work together to improve the safety and transparency of the food supply.

***Lindsey Loving** is the senior director, food ingredient & technology communications for the IFIC, a nonprofit agency in Washington, DC, whose mission is to effectively communicate science-based information on food safety and nutrition to health professionals, journalists and consumers. She is a member of the American Association of Diabetes Educators and the Institute of Food Technologists (IFT), and has given recent presentations at the annual meetings of the American Dietetic Association, School Nutrition Association and IFT. She received a bachelor's of business administration in 2000 from James Madison University in Harrisonburg, VA.*

References

1. www.foodinsight.org/LinkClick.aspx?fileticket=IMLgAIWA7wA%3d&tabid=1399.
2. www.foodinsight.org/Resources/Detail.aspx?topic=2011_Food_Health_Survey_Consumer_Attitudes_Toward_Food_Safety_Nutrition_Health.
3. onlinelibrary.wiley.com/doi/10.1111/j.1539-6924.2011.01722.x/abstract.
4. www.thelancet.com/journals/lancet/article/PIIS0140-6736%2807%2961306-3/abstract.
5. www.efsa.europa.eu/en/efsajournal/pub/660.htm.
6. www.fda.gov/downloads/AdvisoryCommittees/CommitteesMeetingMaterials/FoodAdvisoryCommittee/UCM248549.pdf.
7. www.tandfonline.com/doi/full/10.1080/19440040903470718.
8. jnci.oxfordjournals.org/content/90/3/194.full.pdf+html?sid=26258160-b66e-4739-a888-e042a351bebd.
9. www.fda.gov/food/foodingredientspackaging/ucm094211.htm.

Additional Resources

- onlinelibrary.wiley.com/doi/10.1111/j.1541-4337.2010.00127.x/pdf.
www.cnpp.usda.gov/dietaryguidelines.htm.
www.foodinsight.org/understandingourfood.aspx.

© 2012 The Target Group, Inc. All rights reserved.