



OCTOBER

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[USP Workshop on Adulteration of Food Ingredients and Dietary Supplements](#)

[FCC Forum is open for comment](#)

[Tip of the day](#)

USP Is Hosting a Workshop on Adulteration of Foods and Dietary Supplements to Examine Vulnerabilities, Case Studies, Innovative Detection Techniques, and Evolving Quality Standards

To meet modern-day tastes and demands of consumers, the food and dietary supplement industries are accelerating global sourcing and manufacturing while utilizing increasingly innovative, functional, and natural ingredients. As the complexity of supply chains grows with more distant sourcing of ingredients, so do the risks posed by adulteration. The extent of adulteration, the emergence of promising detection techniques, and the role that quality standards can play in assisting industry and protecting consumers are among areas of focus for USP's upcoming workshop, Intentional and Unintentional Adulteration of Food Ingredients and Dietary Supplements, to be held November 16–17, 2011, in Rockville, Md.

Among the workshop highlights:

- Skim Milk Powder Adulteration Project—Scope, preliminary results, and challenges from this ongoing USP–industry collaborative research project that is currently evaluating the utility of different rapid non-targeted methods for discriminating authentic/pure skim milk powders from those that have been adulterated. This project is intended to create a toolbox of rapid authentication methods, confirmatory methods, and new total protein methods along with reference materials to help prevent economically motivated adulteration of skim milk powder in the supply chain. Many of the tools being explored represent a new paradigm for verifying food ingredient integrity that would be heavily reliant on chemometrics data analysis approaches combined with spectral libraries to assess how similar or different a test skim milk powder “fingerprint” is compared with those from numerous authentic/pure reference “fingerprints.”
- Food Fraud Database—An advance look at a USP-developed database compiling published reports of food adulteration and detection methods, including more than 1,200 entries encompassing over 250 ingredients and based on more than 600 reports. In addition to indicating trends useful to industry to warn of problematic and vulnerable ingredients, the database will help inform USP's future work by assisting in identifying analytical gaps that have been exploited—which USP can use to prioritize monograph modernization efforts. High-level trends including the most commonly reported adulterated ingredients over the past 30 years will be presented.
- Analytical Detection Approaches/Compendial Role—An overview of different analytical approaches—in use or offering promise—including fingerprinting and non-targeted analysis approaches using chromatographic, electrophoretic, spectral, and other novel techniques used to detect adulteration. The compendial role in preventing adulteration, and how new approaches can be incorporated to meet the needs of industry, will be explored.

USP Links

[Food Chemicals Codex \(FCC\)](#)

[FCC Resources](#)

[FCC Revisions Commentary Errata & Notices](#)

[FCC Forum](#)

[Reference Standards Catalog](#)

- Case Studies—Case studies looking at products and ingredients with a history of—or considered at-risk for—adulteration to include natural colors and flavors, spices, pomegranate juice, and weight loss and performance-enhancing dietary supplements spiked with pharmaceutical ingredients and steroids.

Presenters will include representatives from companies including General Mills, Kraft Foods, McCormick and Co., Inc., and Chr. Hansen, among others; the National Institutes of Health; and academia and contract laboratories.

For more information and to register, please visit www.usp.org/meetings/asMeetingIntl/uSP_Headquarters_rockville.html.

FCC Forum December 2011

The *FCC Forum* is the free-access online vehicle through which the United States Pharmacopeial Convention (USP)—the organization that publishes the *Food Chemicals Codex (FCC)*—accepts comments on proposed *FCC* standards. Food manufacturers and all other interested parties are invited to provide feedback on the latest proposed standards available on the *FCC Forum* during a 90-day comment period. Below is a preview of the new and revised monographs that will be published in the upcoming December *FCC Forum*, which will be open for comment on December 27, 2011. The *FCC Forum* is accessible at www.usp.org/fcc/fccForum.html, but this new information will not be available until December 27, 2011.

New:

1. 2-Acetylpyridine
2. Allyl Anthranilate
3. Allyl Butyrate
4. Allyl Cinnamate
5. Allyl Cyclohexane Valerate
6. Allyl Disulfide
7. Allyl Mercaptan
8. Allyl Sulfide
9. alpha-Amylcinnamaldehyde Dimethyl Acetal
10. alpha-Amylcinnamyl Acetate
11. alpha-Amylcinnamyl Alcohol
12. alpha-Amylcinnamyl Formate
13. Appendix XV: Microbial Food Cultures Including Probiotics
14. Chromium Chloride
15. Green S
16. Quinoline Yellow
17. Sodium Selenate
18. Steviol Glycosides
19. Trisodium Diphosphate

Revisions:

1. Appendix V: Proteolytic Activity, Bacterial (PC)
2. Appendix V: Proteolytic Activity, Fungal (SAP)
3. Appendix V: Enzyme Preparations Used in Food Processing
4. Beta-Carotene
5. Calcium Benzoate
6. Cinnamic Acid
7. Eucalyptol
8. Hydroxypropyl Cellulose
9. Methyl Salicylate
10. Methylbenzyl Acetate
11. Monk Fruit Extract
12. Polydextrose
13. Potassium Benzoate
14. Sodium Benzoate
15. Sodium Potassium Triphosphate
16. Sucrose
17. Whey
18. Whey Protein Concentrate
19. Whey Protein Isolate
20. Whey Reduced Lactose
21. Whey Reduced Mineral

Re-Submitting:

1. Krill Oil (new monograph)

- Q. What are the requirements for listing substances in the *FCC*?
- A. The requirements are as follows: (1) the substance is permitted for use in food or in food processing in the U.S. or in other countries that operate a reliable food safety assessment, (2) it is commercially available, and (3) suitable specifications and analytical test procedures are available to determine its identity and purity.

Questions or comments about the *FCC e-Newsletter*?

Please email us at FCCmarketing@usp.org.

If you would like to sign up for the *FCC e-Newsletter*, visit our Web site at www.usp.org/goto/enews.