

# **Emerging Contaminants in the Food Industry: A Testing Laboratory Perspective**

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## **Abstract**

Emerging contaminants are yet-to-be regulated chemicals of interest with increasing attention from government bodies, medical safety experts and/or public sectors. They tend to be identified in early scientific research to have potential health impact. Information on their sources, levels, health hazards, and exposure limits grows over several years to decades of research. As the science becomes more clear, regulatory bodies act and begin to impose limits. However, as in the case of melamine, the need can be so extraordinary that the contaminant goes from relatively unknown to regulated in a matter of months. Other recent examples of emerging contaminants include vanillin, polyfluoroalkyl substances, glycidyl esters, and micro/nano plastics.

Abbott Nutrition (AN) maintains an internal laboratory group focused on emerging contaminants because of the unique testing requirements they bring. In addition to unpredictability in timing of the need for a particular method, trace analysis brings several additional challenges to the laboratory environment. Through the years, the AN Food Safety lab has experienced these challenges firsthand and has developed strategies to mitigate them. Sharing of these learnings should be helpful to other laboratories that perform trace analysis of emerging contaminants in food matrixes.