Broadeining the scope of PFAS analysis in food: No compromise in data reliability

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Per- and polyfluoroalkyl substances (PFAS) are a group of synthetic chemicals widely used in various industrial and consumer products. Due to their persistence, PFAS can accumulate in the environment and pose potential health risks when consumed through contaminated food. For a better understanding of risks associated to PFAS exposure, there is a need to broaden the scope of PFAS analysis in food to ensure comprehensive monitoring and possibly develop mitigation strategies.

Mass spectrometry is a valuable versatile technology for the analysis of PFAS in foodstuffs. Depending on the specific PFAS compound of interest and as well as the required sensitivity, liquid chromatography or gas chromatography coupled with mass spectrometry techniques can be chosen. Targeted MS/MS approached are preferably used for the analysis of specific PFAS of interest with a high precision and sensitivity in food samples. By using high-resolution mass spectrometry and targeted screening methods, a more comprehensive range of PFAS compounds can be detected and quantified in food samples. This broader scope of analysis allows for a better understanding of the extent of PFAS contamination in the food supply chain.

However, broadening the scope of PFAS analysis should not come at the expense of data reliability. It is crucial to ensure accurate and precise results. Confidence in the reported PFAS levels in food is fundamental for decision making regarding risk assessments and regulatory actions.