Technical University of Denmark



Speciation of arsenic by IC-ICP-MS: future standard method and its application on baby food samples

Kollander, Barbro; Sloth, Jens Jørgen

Publication date: 2013

Document Version Publisher's PDF, also known as Version of record

Link back to DTU Orbit

Citation (APA):

Kollander, B., & Sloth, J. J. (2013). Speciation of arsenic by IC-ICP-MS: future standard method and its application on baby food samples. Abstract from 14th Nordic user meeting on ICPMS, ICPOES and AAS, Sweden.

DTU Library Technical Information Center of Denmark

General rights

Copyright and moral rights for the publications made accessible in the public portal are retained by the authors and/or other copyright owners and it is a condition of accessing publications that users recognise and abide by the legal requirements associated with these rights.

• Users may download and print one copy of any publication from the public portal for the purpose of private study or research.

- You may not further distribute the material or use it for any profit-making activity or commercial gain
- You may freely distribute the URL identifying the publication in the public portal

If you believe that this document breaches copyright please contact us providing details, and we will remove access to the work immediately and investigate your claim.

Speciation of arsenic by IC-ICP-MS: future standard method and its application on baby food samples

Barbro Kollander, National Food Agency, Box 622, 75126 Uppsala, Sweden *Jens J. Sloth,* National Food Institute, Technical University of Denmark, Mørkhøj Bygade 19, DK-2860 Søborg, Denmark

Arsenic is known to most people as extremely poisonous and several criminal authors have used this fact to assassinate their characters in novels for decades. However, the authors seldom or never mention which of the species of arsenic they use, although that is elementary for the outcome of the intended murder. For example the organic compound arsenobetaine, the main arsenic species in marine organisms, is regarded as basically harmless to humans while the inorganic forms of arsenic, arsenite and arsenate found in rice, are toxic. To enable the evaluation of the true toxicity from arsenic in food, some kind of speciation analysis has to be performed. In this work, the concentration of inorganic arsenic in some baby food samples is evaluated. The applied methodology has recently been tested in a collaborative trial as a candidate standardized method for the determination of inorganic arsenic in foodstuffs by CEN (The European Committee for Standardization).