

Food Nutrition and Safety Measurements Quality Assurance Program

Request for Participation – EXERCISE 3 NOW OPEN

Program Purpose

FNSQAP is designed to assist laboratories in the development and validation of new analytical methods, in improving the quality of their analytical measurements, and in supporting compliance with regulations enforced by the US FDA, USDA, and other international bodies.

Benefits

Participation in FNSQAP provides opportunities for laboratories to evaluate their current in-house method performance and make necessary improvements. NIST utilizes FNSQAP to determine any community wide analytical challenges and support improvement of measurements through appropriate reference materials and educational resources. Data collected via FNSQAP may also be used to assign values to NIST reference materials. Proof of participation in NIST QAPs may be adequate to demonstrate proficiency in some communities, but the use and distribution of each participant's study results for this purpose will be at the discretion of the participant only.

Participation

Participation in FNSQAP is free of charge, although participants will be required to pay for the cost of sample shipment by providing NIST with a shipping account number using UPS, FedEx (including TNT), or DHL. Participants are responsible for all incurred shipping charges, including those that may result from shipments being returned to NIST because of customs clearance issues. In no cases are participants paid to participate in FNSQAP.

Timeline and Commitment

Registration is currently open and will close on June 30, 2023. Samples will be distributed by August 2023. Laboratories may elect to participate in some or all studies (e.g., only nutritional elements and fat-soluble vitamins) or report only selected analytes (e.g., copper, but not magnesium and phosphorus), as applicable to the work done in their laboratories. Data entry will close in late September, upon which laboratories will receive a preliminary report and have an opportunity to review reported results. Preliminary certificates of participation will be issued in fall 2023, followed by publication of a final report and distribution of final participation certificates by spring 2024.

Study Design, Purpose, and Rationale

Available studies include *nutritional elements* (Cu, Mg, P) and *vitamins* (A, B₁₂) in infant formulas and *contaminants* (PFAS, pesticides) in foods. Samples have been selected to identify measurement challenges and pinpoint sources of bias, error, and variability via between-laboratory comparisons.

Publication of Results

Upon closure of data entry, laboratories will receive a preliminary report containing a summary of reported data, available NIST target values, and consensus results. Preliminary performance certificates will be available while NIST prepares a final report, which will be made publicly available.

Confidentiality

Published tables, figures, and reports are provided using randomized laboratory codes, with identities known only to NIST and individual laboratories. NIST will not knowingly reveal laboratory identities associated with study results.

