

SUMMARY OF ANALYTICAL RESULTS: MULTI-CITY FOOD STUDY

The Multi-City Study was originally designed by Battelle Memorial Institute (Columbus, OH), to obtain preliminary data about the presence of fluorochemicals in foods and in drinking water to understand the potential sources of human exposure. The Multi-City Study paired each of three cities having manufacturing or commercial use of fluorochemical products (test cities) with three cities that do not (control cities).

Information on residues in selected foods was obtained from analyses of food samples collected in a market basket study. The market basket sampling of the original Multi-City Study design was implemented by Pace Analytical Services, Inc., Minneapolis, MN. The samples were analyzed for PFOS, PFOA, and FOSA by Centre Analytical Laboratories, Inc., State College, PA.

The distributions of the PFOS, PFOA, and FOSA residue data by food and city category reveal similar patterns of residue concentrations in the control and test cities for each type of food. A total of 12 samples were found to contain levels of fluorochemical residues above the limit of quantification. Of the 12 samples with measurable fluorochemical residue levels, eight were samples collected in test cities.

Measurable quantities of PFOS were found in five samples: four whole milk samples (three from test cities) and a ground beef sample (test city). PFOS residues found in the foods ranged from non-quantifiable levels to 0.852 ng/g.

Measurable quantities of PFOA were found in seven samples: two ground beef samples (neither from test cities); two bread samples (one from a test city); two apple samples (both from test cities); and one green bean sample (from a test city). PFOA residue levels ranged from non-quantifiable levels to 2.35 ng/g. A value of 14.7 ng/g was found for PFOA in a bread sample from a control city, but was considered “suspect” by Centre Analytical.