

1990 Revision of the FDA Total Diet Study

Jean AT Pennington

Food and Drug Administration

The Food and Drug Administration (FDA) uses the Total Diet Study to monitor the levels of nutrients, pesticide residues, heavy metals, industrial chemicals, and radionuclides in the food supply and the levels of these substances in daily diets. The 1990 revision of the Total Diet Study is based on results from the 1987-88 United States Department of Agriculture's (USDA) Nationwide Food Consumption Survey (NFCS). This is the third major revision of the Total Diet Study since it began in 1961.

The food list and diets are periodically revised when national data on food consumption become available so that the study reflects the current food supply and dietary patterns. The foods collected and analyzed in the first Total Diet Study were selected based on information from the 1955 USDA Household Food Consumption Survey (HFCS); the first revision was based on the 1965 USDA HFCS; and the second revision was based on the 1977-78 USDA NFCS and the Second National Health and Examination Survey conducted by the National Center for Health Statistics.

The Total Diet Study provides for the purchase of core foods of the U.S. food supply in retail markets, the analyses of these foods for selected analytes, and the estimation of daily intake of these analytes by selected age-sex groups. The 1982 revision of the Total Diet Study provided analyses of 234 foods, collected four times per year, and estimates of intakes for 8 age-sex groups.

The 1990 revision includes analyses of 265 foods, collected four times per year, and estimates of intakes for 14 age-sex groups. The revised program includes analyses for water, nutritional elements (Na, K, Ca, P, Mg, Fe, Zn, Cu, Mn, Se, I, and Mo), and other elements (As, Pb, Cd, Hg, Ni, Al, and Sn). In addition, the foods in one of the four yearly collections are analyzed for folic acid and vitamin B-6.