

HUMAN EXPOSURE I

TEMPORAL TRENDS IN INTAKE OF DIOXINS FROM FOODS IN THE U.S. AND WESTERN EUROPE: ISSUES WITH INTAKE ESTIMATES AND PARALLEL TRENDS IN HUMAN BODY BURDEN

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Introduction

Food is likely to be the source of more than 90 to 95 percent of exposures to dioxins in the United States (U.S.) and Western Europe. Several Western European countries have attempted to estimate intake of dioxins and dioxin-like compounds over time. More recently, the U.S. Environmental Protection Agency (USEPA) has estimated intake on a toxic equivalency (TEQ) basis. This paper describes some of the issues associated with evaluating and comparing intake estimates from different countries and from within a country over time. In addition, this paper presents compiled data on human TEQ body burden for selected polychlorinated dibenzo-p-dioxins (PCDDs), polychlorinated dibenzofurans (PCDFs), and polychlorinated biphenyl (PCB) compounds. Because of the long half-life for elimination of these compounds in the human body, changes in human tissue levels are likely to lag changes in levels of sources to the environment and food.