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May 28, 1999

Carol Browner
Administrator
U.S. Environmental Protection Agency
401 M Street SW
Washington, DC 20460

Dear Administrator Browner,

The Children's Health Protection Advisory Committee met on May 5-6, 1999, at which time it continued its review of the scientific information available to EPA to protect children's health, and the processes used by the Agency to interpret and apply that information. The committee and its Science Work Group appreciate the briefings provided by EPA and the U.S. Department of Agriculture, both at this meeting and at a special meeting of the Science Work Group on April 15. Specifically, the Science Work Group reviewed the 1998 Supplemental Children's survey to the 1994-96 Continuing Survey of Food Intakes by Individuals (CSFII), being conducted by the USDA, in collaboration with staff from EPA's Office of Pesticides.

The purpose of this letter is to convey the Committee's commendation of USDA and EPA's efforts to improve the dietary intake information available about children nationally, and to encourage additional cooperative efforts among federal agencies to establish a national longitudinal study on children's health issues in the Fiscal Year 2001 budget.

We strongly encourage EPA and its partners to conduct a longitudinal cohort study which would follow a group of children over time, examining them for diet, drinking water, health status, exposures such as environmental and pharmacological, and other relevant factors from pre-conception, through pregnancy, and into childhood and adolescence. This recommendation is even more imperative, because it will facilitate and incorporate the Committee's specific recommendation that USDA and EPA conduct just such a study regarding children's dietary intakes and nutrition.

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The need for such information is enormous, given that virtually all large national studies since the Collaborative Perinatal Project (CPP) in the late 1950s and early 60s, such as the NHANES and CSFII studies, have been cross-sectional rather than longitudinal in nature, making it very difficult to link exposures with health outcomes. In addition, sample sizes for children are small, and existing data is based on self reporting not contemporaneous measurements. Of particular interest is information about the effects of diet and exposures during critical pre-and post-natal developmental windows.

The value of longitudinal studies has been proven in other health arenas. For example, much of what is known today about prevention of cardiovascular disease emerged from a longitudinal cohort study of adults conducted in Framingham, Massachusetts between 1950 and 1989. However, as with many studies of that era, it was largely limited to relatively affluent white male adults. As our country moves into the next millenium, we urgently need longitudinal data from a large enough sample of our nation's children to begin to understand the most significant factors that contribute to current and future health concerns, such as:

- Why is the prevalence and morbidity of asthma increasing so rapidly even with significant improvements in outdoor air quality and the availability of new drug therapies?
- What is the effect of changes in dietary consumption patterns?
- What are the environmental risk factors associated with developmental disorders or behavior problems?

Longitudinal studies require substantial financial resources to be conducted properly. Thus, such a study must be both strategic and precise, designed to test clear hypotheses and have a sample size sufficient to validly test them. It also is likely to be true that combining smaller, special purpose studies that might be under consideration for the Fiscal 2001 budget into a larger, collaborative effort would have a much more significant impact and gain efficiency and synergy of research effort and investment. It should be possible, and is certainly desirable, to construct a core study program in such a way as to provide a structure for additional, complementary research, both among local, state and federal agencies and with the private sector.

Internationally, the United States is one of the developed countries that doesn't invest in ongoing, systematic longitudinal studies of the diets, nutrition and health outcomes of its children. Ironically, for the wealthiest country in the world, our children still suffer from low birth weight, higher infant mortality, and poorer growth and development measures than other industrialized nations. Hopefully, better information could help identify those factors of most importance to improve children's health and well-being.

The Children's Health Protection Advisory Committee remains very committed to supporting EPA's efforts to better protect the health and safety of children, and wants to contribute to future thinking about the feasibility, scoping and design of an effective, national, longitudinal study on children's health.

Sincerely,

J. Routt Reigart, MD
Chair, Children's Health Protection
Advisory Committee

cc. R. Trovato, P. Goode