

IRAC Work Group

EVALUATION OF DIETARY ASSESSMENT TOOLS

Background

Dietary assessment involves the estimation of consumption levels of one or more food items or food commodities across an entire population or for specific life stages (usually stratified by age or sex). As such, generating these food consumption distributions is an essential part of any risk analysis that includes a dietary exposure component. While the basis for most national-level dietary assessments in the United States is the data collected by the What We Eat in America (WWEIA) component of the National Health and Nutrition Examination Survey (NHANES), there is no single, standard software application or tool for the analysis of this data and the generation of custom food consumption distributions. Approaches used by various federal agencies range from the time-consuming coding of individual analyses in SAS/SUDAAN to the use of software tools such as DEEM-FCID, FARE, and Creme Food. The goal of this work group is to conduct an authoritative comparison of currently available dietary assessment tools and, in doing so, determine whether IRAC members' dietary assessment needs are being met, or if development or modification of a new or existing tool is necessary.

Proposal

Form a work group of interested IRAC members to

- 1) Identify required features and capabilities of an "ideal" dietary assessment tool that are important to agencies performing dietary assessments,
- 2) Research, summarize, and compare the advantages, disadvantages, capabilities, and potential uses of currently existing dietary assessment software packages,
- 3) Integrate 1) and 2) by determining whether U.S. Government needs for dietary assessment can be met through existing software tools and, if necessary, outline a proposal for addressing unmet needs.

Three main emphases have been identified for the analysis: a) the data sources that underlie dietary assessment, particularly consumption surveys and recipe databases; b) the software applications and modeling approaches used to analyze the data, ranging from built-for-purpose tools to commercially available software packages, and c) a comparison of how agencies use dietary assessment in their decision-making processes.

Expected Outcomes (Deliverables)

- 1) A white paper describing the work group's review of IRAC members' dietary assessment needs, the pros and cons of currently existing dietary assessment tools, and desired capabilities of a future tool (if necessary),
- 2) A summary of findings published on Foodrisk.org, including links to the tools and a comparison chart,
- 3) A proposal for a symposium or workshop to present and discuss findings, possibly for the 2014 annual meeting of either the International Society of Exposure Science (Cincinnati, October 2014) or the Society for Risk Analysis (Denver, December 2014).

Time Frame for Completion

It is expected that the white paper and the summary of findings for Foodrisk.org will be completed by the end of FY 2014. While the symposium or workshop would take place in FY 2015, the proposal for such a symposium will likely be due in April or May 2014. IRAC participants in this workgroup would communicate and interact regularly during FY 2014, mostly via email and telephone conferences. Depending on the physical location and availability of work group members, regular or semi-regular in-person meetings in Washington, DC, may be desirable.

Budgetary Requirements

No expenses are expected during FY 2014, with the exception of work group members' time and salary. If a symposium or workshop proposal is accepted, the participants' conference registration and travel would constitute an FY 2015 expense.

Participating Agencies

EPA	Office of Pesticide Programs	<i>(tbd)</i>
FDA	Center for Food Safety and Applied Nutrition	<i>Judi Spungen</i>
	Center for Veterinary Medicine	<i>Gregg Claycamp</i>
USDA	Agricultural Marketing Service	<i>Martha Lamont, Diana Haynes</i>
	Agricultural Research Service	<i>Alanna Moshfegh</i>
	Food Safety and Inspection Service	<i>Alexander Domesle*</i>
	National Institute of Food and Agriculture	<i>Dionne Toombs</i>

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