Research Gaps in Knowledge About (applying and translating) Nutrition Interventions and Services for Older Adults in the Community Setting
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Ongoing Needs as Identified by NIH 2003 Workshop on Dietary Supplement Use in the Elderly

1. Further Characterization of Dietary Supplement Usage Behaviors
2. Improved Methodologies: Biomarkers, Analytical, Diet Assessment Tools & Systematic Reviews
3. Age Sensitive Pre-clinical & Clinical Studies
4. Informational Databases
5. Education and Dissemination
Informational Databases

- Development of relational databases; those that address structural-activity relationships that need to be populated with biochemical, toxicological and dietary supplement information. Need is ongoing.
- Continual need exists for informational databases on dietary supplements for clinicians, consumers, and researchers. Commercial groups have subscription databases which have been developed to respond to this need. NIH/ODS supporting development of a free public dietary supplement label database for consumers and researchers.
Usage Behaviors

• Need to characterize the effect of caregivers’ advice (still exists)
• Need to characterize the diversity of beliefs. CDC/National Health Interview Survey 2002 captured some information. Data also from participants in NIH sponsored clinical trials
• Need to identify behavioral, cultural, and social factors that can affect and confound data. NHANES collects this information on an ongoing basis. Need still persists.
Methodology

• Validation of biologic markers used in national surveys. NHANES has been strengthened to address this, e.g., folic acid and vitamin D biochemistries.

• Development of analytic methods. ODS Analytical Methods and Reference Materials Program has supported development and use of NIST Vitamin D standard as well as NIST standardization of a host of other dietary constituents and supplements.

• Ongoing need to evaluate methods used for the collection of dietary data. Partially addressed by NIH grantees; more needs to be done.
Pre-clinical and Clinical Studies

• Trials evaluating dietary supplement safety and efficacy are still needed — most studies not designed or powered to evaluate safety.

• Need exists to capture usual dietary intakes as well as total intakes (exposure). Data available for vitamins and minerals but lacking for protein, omega-3 fatty acids, herbs and botanicals.

• Ongoing need for the determination of micronutrient requirements and the variation in those requirements that occur during aging as well as the determination of efficacious doses.

• Ongoing need for characterization of drug and food interactions.
Education and Dissemination

• Need continues to exist to determine the best way to incorporate formal methods of weighing evidence for translation into policy and clinical practice. Multiple groups, AHRQ, NIH, USDA, ADA, have explored methodology for evaluating, tabulating, and interpreting the evidence-base for dietary supplements. This is an exciting and ongoing effort --- recently utilized by the USDA for the Dietary Guidelines for Americans and the IOM for the Vitamin D Report.

• The development and communication of appropriate information to caregivers, and the development of education materials more amenable to seniors is still an ongoing need.
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