

***Interactive Comprehensive Lifestyle Interview by Computer (iCLIC Study):  
Feasibility Study of Web-Based Automated Self-administered 24-hour Dietary (ASA24)  
and Physical Activity (ACT24) Recalls***

Objectives:

- Evaluate technical problems associated with use of ASA24 and ACT24 in the field
- Estimate response rates for ASA24 and ACT24 as well as two web-based versions of conventional questionnaires (a lifestyle and health questionnaire and a food frequency questionnaire)
- Estimate ranges of dietary intake and physical activity assessed by ASA24 and ACT24

In spite of long-standing hypotheses relating diet and physical activity to several cancers, diet- and physical activity-cancer associations have been modest at best and often inconsistent in epidemiologic studies. Investigators around the world have become increasingly concerned that error in the measurement of both diet and physical activity is compromising our ability to detect important nutrition-cancer associations. Most commonly used diet and physical activity assessment methods have been based on a relatively small set of questions (e.g. 124 food items consumed or 5-10 physical activities in the past 12 months). Recent developments in computer technology provide an opportunity to use internet-based instruments to assess an individual's diet and physical activity more accurately and cost-effectively.

NCI has been developing two web-based instruments, an automated self-administered 24-hour dietary recall (ASA24) and a physical activity 24-hour recall (ACT24). Each recall can be administered several times over a year. Although these two instruments have the potential to qualitatively improve exposure assessment (at relatively low cost), they need to be evaluated for feasibility before being incorporated in cohorts on a large scale. In addition, a web study management system (WSMS), which has been developed as an essential tool to conduct a web-based study, needs to be evaluated.

These web-based instruments and the accompanying management system represent a novel approach to carrying out diet and lifestyle research. The computerized, web-based study method can potentially be applied in many epidemiologic contexts, including both existing and planned prospective cohort studies.

Therefore, we plan to investigate the use of ASA24 and ACT24 among 15,000 AARP members 50 years of age and over to evaluate technical problems, determine response rates, and estimate dietary intake and physical activity ranges. In addition, we include in this feasibility study two web-based versions of conventional questionnaires (a lifestyle and health questionnaire and a food frequency questionnaire). We will examine certain performance characteristics such as completion time and the response skip pattern and also evaluate technical problems associated with the study management system.