

## Online Exclusive

# Diet Assessment Methods: A Guide for Oncology Nurses

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Diet may play a significant role in cancer prevention, disease progression, and treatment tolerance. An in-depth search of the literature revealed limited information geared toward nurses about diet assessment methods used in research. The purpose of this review is to synthesize the evidence regarding diet assessment methods important in oncology studies. The method used varied based on the study size, duration, and research question. For example, studies focusing on mean nutrient intake of a group used a 24-hour dietary recall, estimated food diary or dietary record, or food frequency questionnaire. Studies investigating usual nutrient intake predominately used multiple 24-hour dietary recalls, dietary records, biomarkers, or food frequency questionnaires. Measuring dietary intake accurately in a cost-effective manner is a difficult task. Selection of the appropriate assessment tool is critical for the generation of quality data. Oncology nurses are increasing their involvement in nutrition research, and the findings from this review may promote a better understanding of the published and ongoing research in this important field of study.

**T**he role of diet and specific bioactive foods has received much attention in recent years as a potential mechanism for cancer prevention (Gibson, 2005; Kelloff et al., 2000; Parsons et al., 2009; Sarkar & Li, 2004). The impact of diet on health was noted more than 200 years ago with the observation that scurvy was from deficient intake of fresh fruit, such as oranges (Lind, 1753, as cited in Bartholomew, 2002). Since then, a vast number of dietary studies have taken place using a variety of diet assessment methods. Evaluating nutrient intake is complex because it is rarely an all-or-nothing variable. Several variables can affect food selection, including socioeconomic status, seasonal availability, local food customs, and cultural norms (Gibson, 2005). Some foods are less expensive or readily available at specific times of the year (e.g., fresh local fruit in the summer).

### At a Glance

- ◆ Information regarding diet assessment methods, advantages, and limitations is insufficient in the nursing literature.
- ◆ Several methods are popular in measuring dietary intake in research: weighed food records, estimated dietary records or food diaries, dietary recalls, food frequency questionnaires, and biomarkers.
- ◆ Measuring dietary intake in a cost-effective yet accurate way that creates minimal patient inconvenience is difficult. A compromise often is made among the assessment method, the logistics of the study design, and the intensity of measurements that the study population will tolerate.

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