

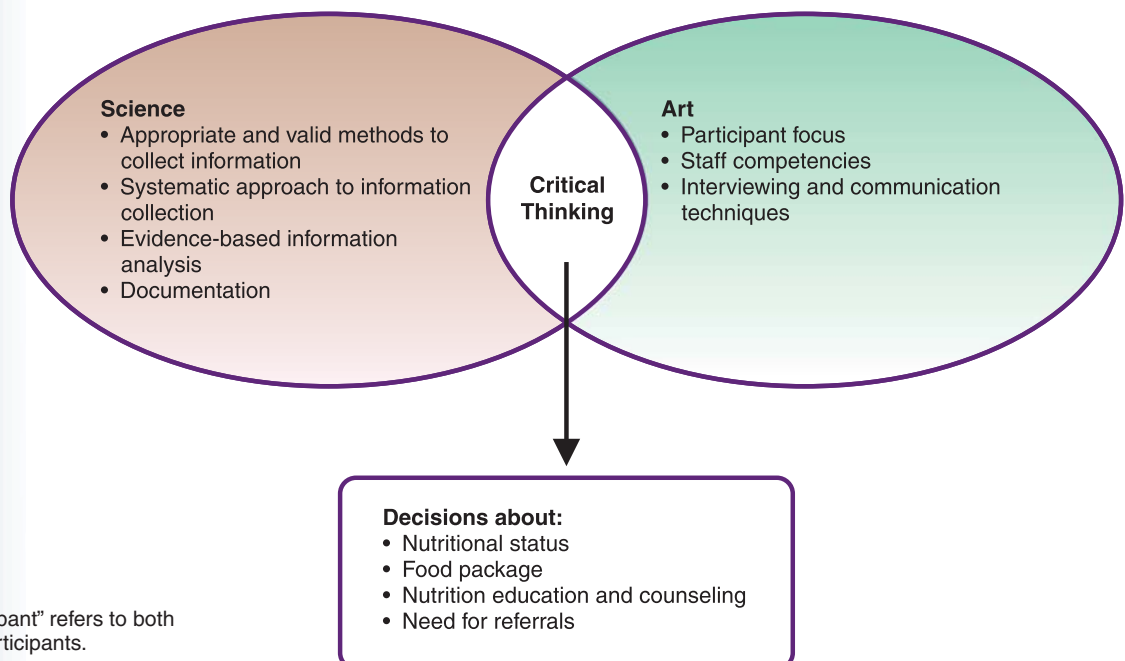
Process of a Value Enhanced WIC Nutrition Assessment

The purpose of this chapter is to review the aspects of the nutrition assessment process that are necessary to provide a *value enhanced WIC nutrition assessment* for every participant. There are two fundamental precepts for this chapter:

- 1) The WIC nutrition assessment is the foundation from which all subsequent nutrition services in WIC are designed; and
- 2) A WIC nutrition assessment is the process of obtaining and synthesizing relevant and accurate information about a participant¹ in order to develop the most appropriate WIC intervention.



A quality WIC nutrition assessment contains elements of both art and science, and requires the use of a systematic approach to collect, evaluate, and make use of the information that is elicited from the participant. It must be grounded in science to ensure accuracy and consistency in nutrition risk identification, but should also be tailored to the unique needs of each participant. Skills (also called competencies) in communication and rapport building, critical thinking, and assessment techniques are essential for WIC staff to be able to perform a nutrition assessment that can be used for meaningful and relevant nutrition education, counseling, and other nutrition-related services.



¹ The term "participant" refers to both applicants and participants.

Ideally, nutrition assessment consists of identifying each nutrition risk or condition pertinent to the participant through careful, systematic data collection and questioning. The primary goals of the WIC nutrition assessment are 1) to identify and document the participant's risk(s) and needs in a prioritized manner so they can be addressed through the appropriate nutrition services; and 2) to facilitate the continuity of care throughout subsequent WIC visits, so that the participant's progress can be maintained and built upon.

In establishing an interactive, participatory approach to nutrition assessment, State agencies should consider:

- Environment;
- Engagement; and
- Endpoint.

The *environment*, both physical and psychological, can influence the relationship between the participant and WIC staff. A warm, friendly environment communicates that participants are welcome. Feeling welcome can help build a sense of trust and foster good rapport with the participant who is asked to provide personal information. Collecting quality information requires that staff members have good communication skills in order to ask the right questions at the right time and in the right format.

Engagement is the active involvement of the participant in the assessment process through dialogue, information exchange, listening, and feedback. Participants should understand the purpose, steps, and expectations of the nutrition assessment, and should feel free to express comments or concerns at any time. The *value enhanced* WIC nutrition assessment process, whether paper-based or a computer-assisted interview, should emphasize face-to-face interaction to build rapport, encourage probing to clarify information, and allow feedback to flow smoothly between staff and participant.

The *endpoint* of the value enhanced WIC nutrition assessment is the identification of risk factors and a plan for intervention. Risk factors may be considered as the springboard to formulate an intervention plan, rather than the conclusion of the discussion. But planning the most effective WIC intervention *for* a participant must include interaction *with* the participant. A participatory approach to assessment also makes use, where appropriate, of previously-collected information to assess progress in subsequent certifications.

Steps in the Process of WIC Nutrition Assessment

A *value enhanced* WIC nutrition assessment is accomplished by systematically completing a series of five steps:

1. Collect the relevant information;
2. Clarify and synthesize the information that has been collected;
3. Identify the pertinent and appropriate risk(s) and other related issues;
4. Document the assessment; and
5. Follow up on previous assessments, as appropriate.

NOTE: Not only are these steps sequential, they are also cyclical in nature, so that Step #5, Follow-up, naturally overlaps with Step #1, Collecting the relevant information, in that follow-up activities generally involve information collection as their starting points.

Now to examine each of these steps in greater detail:



1. Collect the relevant information.

As indicated above, collecting information relevant to a complete and effective WIC nutrition assessment must be done in an organized, thorough, and consistent manner. This helps to ensure that relevant information is gathered efficiently, and that data are not missed, while allowing for reasoning and flexible thinking in the evaluation of the information collected (Step #2).

No single measurement can indicate a participant's nutritional status or ability to improve health. In fact, the VENA initiative emerged from the finding of the 2002 IOM report that "traditional" tools generally accepted for use in establishing dietary risk (food frequency questionnaires and 24-hour dietary recalls) were not appropriate for individual eligibility determinations in the WIC setting. This finding did not mean, however, that local WIC agency staff should not collect assessment information (to include diet information) for each WIC participant. In addition, it does not mean that the assessment process should stop once one risk has been identified. The assessment must be comprehensive in order to obtain a clear picture of the issues and variables that impact the participant's nutritional and health status.

With this in mind, the following relevant and accurate information should be obtained and synthesized during each WIC nutrition assessment. The information elements listed below represent an outline of the data to be collected. Appendix A includes a table that lists for each WIC participant category more comprehensive, detailed information to guide the type and content of questions that should be asked during the information-collection step of the VENA process. The table addresses:

- *Anthropometric data*
- *Biochemical data*
- *Clinical data*
- *Dietary information*
- *Environmental and family information*
- *Other adjunct health information and technical requirements*

Appropriate and valid methods to collect information

When selecting methods (self-administered questionnaires, use of automated systems, etc.) to collect relevant information, the WIC State agency should consider, in addition to the risk criteria and FNS-established cut-off levels (such as hemoglobin/hematocrit levels), such factors as the participant who is being assessed, the practice setting(s), the requirements of the State or local management information/automated system, and the need for accuracy and reliability in risk determination. Possible sources for such methodologies include, but are not limited to:

- Government agencies, such as the Department of Health and Human Services' (DHHS) Centers for Disease Control and Prevention (CDC) and Maternal and Child Health Bureau (MCHB);
- Organizations, such as the American Dietetic Association (ADA) and the American Academy of Pediatrics (AAP);
- Professionals, recognized as experts in disciplines such as nutrition, medicine, or nursing; and
- Methodologies, devised for specific equipment, such as hemoglobin-testing machines.

Use of tools to collect information

State agencies may choose to develop their own instruments for collecting relevant information, or may elect to adapt the instrument(s) developed by another State agency for their own use. Whichever option a State agency elects, some of the questions to be considered for this step in the process should include:

- What are the issues and needs of the participant?
- What risk criteria are used, and how should they be identified?

- What information needs to be collected?
- How might the information to be collected differ for a new certification, a subsequent certification, or a mid-certification interview? (For example, the medical history information section at a subsequent certification could be abbreviated to capture only new information since the last certification.)
- What method(s) should be used to obtain the information – oral, written, other, and/or some combination of these methods?
- What types of questions should be asked – open-ended, closed-ended (yes/no), or a combination of the two?
- What information can or should be captured in an automated system?
- How will the information-collection instrument(s) be tested to determine validity?
- How will State/local agency WIC staff be trained and monitored to ensure consistent use of the information-collection instrument(s)?

Additional guidance can also be found in the *WIC Nutrition Services Standards* (issued by the FNS in 2001), and the *Dietary Risk Assessment in WIC* Section and Appendix B, *Assessment Questions and Questionnaires*, to this Guidance.

Systematic approach to information collection

Finally, a *systematic approach* to the collection of relevant information means obtaining the information in an organized and consistent way. One example of such an approach is using a written procedure that details a sequence of steps to collect height and weight measurements for each participant. A systematic approach ensures that participants are assessed equitably and accurately. Each State agency should determine the systematic approach that is most suitable for its needs. While there is no “best” approach for a WIC nutrition assessment, three examples are:

1. The traditional “ABCD” (Anthropometric, Biochemical, Clinical, Dietary data) approach used most frequently throughout the larger nutrition profession;
2. A modified ABCD approach, organized by WIC participant category (see Appendix A, *Relevant WIC Nutrition Assessment Information Tables*); and
3. A health outcome-based approach with a public health orientation, organized around desired health outcomes (see Appendix C, *Health Outcome-Based WIC Nutrition Assessment*).

Health Outcome-Based WIC Nutrition Assessment

The health outcome-based WIC nutrition assessment is offered as an example of a positive approach to assessment where a desirable health outcome serves as a focal point for collecting relevant information, rather than focusing on deficiencies. Using a positive approach to assessment in which the participant, parent or guardian gains a greater appreciation of how to attain good health and recognizes her own need(s) and/or an infant's or child's needs for health improvement can lead to more effective WIC interventions. It also provides an organized, systematic way to perform an assessment.

2. Clarify and synthesize the information that has been collected.

Once the relevant information has been collected, the next step in the process of the WIC nutrition assessment is to be sure that the information is indeed relevant, and that any ambiguous or incomplete information is clarified so that it can be used to assist the participant most effectively. *Critical thinking* is essential to the successful completion of a value enhanced WIC nutrition assessment; the individual responsible for gathering the relevant information must be trained in critical thinking in order to complete the assessment process, i.e., to make the correct nutrition risk determination(s) and provide the appropriate nutrition education, counseling, and referrals for each WIC participant.

Critical thinking is the disciplined process of organizing and synthesizing information to evaluate and prioritize it appropriately. It is more than problem-solving. The process of critical thinking involves integrating facts, informed opinions, active listening, observations, questioning, and autonomous thinking in order to reach an informed and unbiased conclusion. In the value enhanced WIC nutrition assessment, it enables staff to identify and extract pertinent information and data from all sources, distinguish accurate and relevant information, know when to seek additional information, and make decisions about the participant's nutrition risk conditions and counseling/intervention plan. Critical thinking necessitates the collection of *all* information *prior* to deciding upon the best course of action.



Management Information Systems (MIS) can play an important role in the assessment process. They can be used to: store the assessment information; automatically assign risk factors; improve the accuracy of risk assignment (particularly for risks with numeric cut-offs); and perform calculations (e.g., BMI) that save time. However, the use of MIS should never be considered as a replacement for critical thinking skills and professional judgment; nor should it replace dialogue and feedback between staff and participant during the WIC nutrition assessment.

Skills in critical thinking can be developed through training, guidance, and practice. The knowledge and skills needed for critical thinking are described in detail in Appendix D, *Essential Staff Competency Tables for WIC Nutrition Assessment*. This appendix looks at the specific elements of critical thinking as they apply to the information that has been collected from the WIC participant.

3. Identify the pertinent and appropriate risk(s) and other related issues.

Once the relevant information has been collected and clarified, it must be evaluated against the cutoff values established in the most recent version of WIC Policy Memorandum 98-9. The cutoff values for each risk criterion are evidence-based. The source of information used to identify a WIC participant's risk factor(s) should be documented in the participant's casefile or record.

Referral information can also be very useful in the WIC nutrition assessment process. However, there may be instances when such information is ambiguous or incomplete. Some issues, such as inaccurate or missing height/weight measurements can often be resolved at the local WIC agency or clinic. Others may require WIC staff to consult with the referring health care professional for clarification. Any changes to referral information should also be documented in the participant's casefile or record.

In addition, other related issues (e.g., cultural preferences, environmental factors) – that are not included in the list of allowed nutrition risk criteria – should be identified. This type of information is crucial when planning personalized nutrition interventions that will improve the health status and influence the behaviors of a participant.

Each participant must be informed, in a constructive and sensitive manner, of the risk factor(s) – barriers to positive health outcomes

– that have been identified. While this is mandated by WIC Program regulations, it is also necessary if participants are to improve their health status. However, if participants feel that they (or their children) are being judged by the assignment of risk factors, they may not be receptive to the planned intervention.²

4. Document the assessment.

Documentation of the relevant information collected during a WIC nutrition assessment and of the risk factor(s) assigned as the result of such an assessment, in addition to being required by the WIC Program regulations, serves other valuable purposes. Documentation is reviewed during management evaluations or other program monitoring procedures, in order to evaluate the quality of WIC services provided. It also furnishes evidence of how effective the services are to a WIC participant.

Careful, thorough documentation should also be done to facilitate communication with other WIC staff, which allows for continuity of care and helps to streamline workflow. Good quality documentation allows the WIC staff to start discussions at subsequent appointments with the participant after only a minimal review of the previous nutrition assessment(s).

Questions to consider in determining policies for documentation include:

- What information should be documented?
- Where should the information be documented – in a paper record or in an automated system?
- What standards should be set for ensuring that records can be easily and efficiently read by other staff members or by other local WIC agency staff when records are transferred between agencies?
- How can confidentiality be assured?
- What format is best for the WIC setting? Narrative charting, problem-oriented charting, focus charting, and charting by exception are examples of formats used in dietetics practice.
- How might the documentation set the stage for educational contacts that facilitate behavior change?
- Should care plans be required for all participants or only for those who are designated as high-risk participants?

² Beyond Nutrition Counseling, Reframing the Battle Against Obesity, Discussion Guide, Version 1.01, September 2002.

As with the elements that must be considered in Step #1, collecting relevant information, the State agency has to decide on the elements of documentation that best serve its particular needs and its WIC participants. The FNS provides basic guidelines for the information that must be documented as part of the WIC certification process, both in regulation and in the annual State Plan Guidance document. However, documentation is more than a Federal requirement. It provides the framework of information that WIC staff can use to establish credibility with a WIC participant and allows for continuity from visit to visit.

5. Follow up on previous assessments, as appropriate.

Once an initial WIC assessment is completed, the conclusions drawn from the process are used to determine nutrition risk and guide the personalized nutrition services provided. Encouraging the participant to identify a nutrition education goal during the initial contact, and following up on the goal is particularly valuable in facilitating behavior change³. Every time a participant returns, WIC staff should follow up on progress made by the participant: Did the participant reach a goal that was set at the previous counseling session? What barriers were encountered, if any? How did s/he deal with these barriers? Questions such as these close the loop and help to identify a starting point for the next discussion. Without adequate follow-up, opportunities will be limited for refining and realigning goals that ultimately contribute to a healthy outcome. In addition, participants appreciate the continuity of care that is provided when WIC staff members recognize and remember specific aspects of a previous encounter.

As illustrated in the diagram on page 8, the WIC nutrition services process is cyclical rather than linear. Once the initial WIC certification visit has been completed, follow-up becomes the transitional step between visits. An integral component of effective follow-up is the collection of relevant information, thus providing the starting point of the *value enhanced WIC nutrition assessment* at subsequent encounters between the participant and WIC staff.

³ Contento IR, Randell JS, Basch CE. Review and analysis of evaluation measures used in nutrition education intervention research. *J Nutr Educ Behav* 2002; 34:2-25.

