Module 06:
Nutrition Risk Factors

Understanding, assigning and documenting nutrition risks in WIC

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Instructions

1. Read the information.

2. Read each activity.

3. Complete the review sheet at the end of the activity.

4. If you have trouble answering the questions, read the activity again to find the answers or ask your director for more information.

5. Make arrangements with the program director at the indicated points to demonstrate your ability to use what you have learned in the clinic.

6. After you complete all of the activities, ask your director for the final review. Have your director check your answers.

7. Review the correct answers if you have missed some questions.

You may keep this manual as an on-the-job reference.

Items to gather prior to reading this manual:

- Nutrition Risk Factors Manual
- Risk Questionnaires
6 – 1 What are Nutrition Risk Factors?

**Objectives**

After completing this section, you will be able to:

- Understand the tools used to identify a client’s nutrition risks.
- Understand how risks are prioritized and be able to recognize high risks versus general risks.
- Identify which risks are generated by the computer and which are manually entered by WIC staff.
- Use the table of contents in the risk manual to identify the priority and category for each risk and whether or not it is high risk.

**Overview**

In the first unit, you learned about the four requirements of eligibility for the WIC program. One of those requirements was that the applicant has a nutrition risk. This unit discusses the nutrition risks and how they are determined.
What is Nutrition Risk?

A nutrition risk is a condition that places a person at risk for not growing or developing normally. The risk may occur for a variety of environmental, genetic, medical or dietary reasons. For example, a person's food intake may negatively affect his/her health. A nutritional risk can also occur when a person has a health condition that negatively affects his/her food intake.

Either way, the person's health could be improved through better nutrition. WIC helps improve nutritional risks through nutrition education and providing nutritious foods. Nutritional risks can be found in several ways as outlined below.

Tools for Identifying Nutrition Risk

Measuring/Lab Screening
In another unit, you learned about how to take measurements accurately. Many nutritional risks are found by using these measurements. For example, a measurement may show that a client is overweight or underweight. It may also show that a client has not gained enough weight during pregnancy.

You also learned how to take a blood sample to determine whether an applicant has a low hemoglobin value. A low hemoglobin is also a nutrition risk. A low hemoglobin may indicate that a person has anemia. One type of anemia is caused by not having enough iron in the blood (iron deficiency anemia.) It is a nutritional risk because it can be treated through changes in the diet.

Nutrition Assessment Questionnaires
Each staff member has a series of Nutrition Assessment Questionnaires to aid in risk identification. The questions are organized by category and for infants by age. These nutrition assessment questionnaires are mandatory at certifications and for pregnant women and infants at all follow-up visits; however, you only need to ask the questions that are applicable to the client you are seeing. For example, if the client is a pregnant woman and this is her first pregnancy you would not ask questions about her previous pregnancies. Also, when working with families, some questions may be repeated, so only ask the question once. For example, all questionnaires include a question about whether they have a working stove, refrigerator and running water; however, each family only needs to be asked the question once.

Many medical conditions cause a nutritional risk. These conditions are identified during the assessment process by asking the questions on the Nutrition Assessment Questionnaire. Examples include diabetes, high blood pressure, kidney disease, cancer, lactose intolerance, and others. These
conditions may be improved by changing food intake or following a special diet.

Certain dietary practices can affect an individual's health. Examples include diluting infant formula, giving an infant solid food too early, drinking too much juice and others. These risks are identified by asking the questions on the Nutrition Assessment Questionnaire or by the Health Interview Screen in STARS.

Health Interview Screen
The Health Interview Screen in STARS must be completed for each client at all certifications, midcertifications and whenever a change (i.e. breastfeeding status, formula introduction, etc.) has been made. This screen is used to assess risks relating to alcohol use, smoking, breastfeeding status and formula and solid food introduction.

Other Risks
Some social problems can cause nutritional risks. These situations, such as Homelessness and Foster Care are identified through the certification interview process.

Nutrition Risk Manual
The Nutrition Risk Factors Manual is a tool for you to use in your daily tasks to help identify nutrition risks. The Manual lists every nutrition risk by code and name. It also provides their definitions, which categories they can be used for, the priority of each risk and whether or not the risk is consider “high risk” and/or auto-calculated. These will be discussed below. The nutrition risk manual is in an electronic form and should be saved to your computer desk top.

Risk Priority
Each risk for each category is assigned a priority number from one to six. One is the highest priority and six is the lowest priority. Risks with a high priority are more critical to the growth and development of the woman, infants or child than risks with a lower priority. In addition, risks for certain categories have a higher priority than for other categories. Pregnant women and infants usually have a higher priority than children and postpartum women.

Priorities are used when a local agency has reached its maximum participation level and a waiting list must be started. When this occurs, persons that would benefit most from the WIC program would be certified first. The priority
would be used to determine the order that clients would be enrolled in the program.

Look at the Nutrition Risk Factors Manual Table of Contents. Find the column titled Category/Priority. This column indicates whether or not the risk listed applies to the category. If there is a number in the space corresponding to the category, the risk is applicable to that category and has the priority of the number listed.

For example, look at the first risk listed, Underweight (Women). Moving to the right you see that risk is valid for pregnant, breastfeeding and postpartum women. Pregnant and breastfeeding women have a priority of 1. Postpartum women have a priority of 6. The risk is not applicable to infants or children.

**Computer Generated Risks**

The computer uses the information that you enter into the system during a certification to generate some of the nutritional risks. The system will automatically assign those risks for each client. A message will pop up on opening of the risk screen to indicate that a risk has been generated by the computer. It is very important to enter accurate information into the computer so that risks are not erroneously assigned.

Look at the Nutrition Risk Factors Manual. Notice that the table of contents labels the risks with a B to indicate that they are computer generated. These risks may also be manually entered. Many of the measurement risk are auto-calculated by the computer.

**High Risk**

Some risks are designated as high risk. This means that clients with these risks have nutritional needs that require the intervention of a Registered Dietitian or nutritionist.

The risks that are designated as high risk for each category are shaded in the Nutrition Risk Factors Manual. For example, the Underweight (Women) risk is high risk for all women. However, risk #331, Pregnancy at a Young Age is high risk only for pregnant women, not breastfeeding or postpartum women.

In STARS, each risk that is high risk is colored pink. Once a high risk is assigned and the client is certified, a red HR is displayed in the upper right corner of the client header.

After a client has been identified as high-risk the client should be referred to a nutritionist for the next appointment. They should only receive one month of
checks at a time until the nutritionist approves bimonthly or tri-monthly issuance. The client must be seen by the nutritionist within 60 days of certification for more in-depth counseling.

**How To Identify Nutrition Risk**

It is important to identify all the nutritional risks for each WIC client. In order to do so, WIC staff should complete all of the required fields in STARS and ask all the questions on the Nutrition Assessment Questionnaire for the category. If the client answers positively to one of the questions, one of the risks that is listed below the question may apply to the client. Follow-up questions should be asked as applicable to determine if the risk applies.

Many risks that are found by asking the client questions are self-reported by the client based on a physician diagnosis. Self-reporting should not be confused with self-diagnosis where a person simply claims to have or to have had a medical condition without any reference to professional diagnosis. A self-reported diagnosis should be confirmed by asking whether a medical professional has diagnosed the client with the condition.

**Using the Risk Manual for Risk Descriptions**

The Nutrition Risk Factors Manual is used to provide the description of each risk so you can correctly determine whether or not the client should have the risk assigned. The description can be found on the page number listed in the column marked “Page” corresponding to each risk in the Table of Contents. For example, the first risk listed, Underweight (Women) is found on Page 1.

Find risk number 311, History of Preterm Delivery in the Table of Contents. What page is it located on? It should be on Page 44. Find Page 44 in the manual. The page numbers are located on the bottom right of the page.

Look at the risk description for History of Preterm Delivery. Each description provides the following information:

- Risk Code
- Title of Risk
- Definition of the Risk /cut-off-value
- Participant Category and Priority
- Justification

There is a lot of information here! The section that you should focus on is the risk definition. This is the information you will need to determine whether or not a client has a certain risk factor.

You can see for risk 311 that the client must have had an infant that was born at 37 weeks or less. You can also see that for pregnant women, the premature
birth could have occurred during any previous pregnancy. However, for breastfeeding or postpartum women, the premature birth could only have occurred during the most recent pregnancy.

Whenever you are unsure about whether a client should be assigned a certain risk, you can use the definition in the Nutrition Risk Factors Manual to guide you. Keep the manual within reach so you can quickly look things up if needed.
1. Name four tools to identify nutritional risks.

2. Review the Nutrition Risk Questionnaires and become familiar with all of the questions. Ask your director if you do not understand any of the questions.

3. How many risks must a client have? When should you stop searching for risks?

4. What are risk priorities and what are they used for?

5. What is meant by high risk?
6 – 2 Understanding Nutrition Risks

**Objectives**

After completing this section, you will be able to:

1. Identify the correct nutrition risks for each WIC client.
2. Document nutrition risks correctly in STARS.

**Overview**

Now that you understand what a nutrition risk is, you will need to know exactly what the risks are and how to assign them to a client. This section will help you become familiar with the risks and their definitions. You should always keep your Nutrition Risk Factors Manual handy at your desk to help you when you are unsure of a risk definition.
Measurement and Blood Work Risks

Measurement and blood work risks are those risks that are assigned based on heights, weights or blood work of clients. These are risks 101 through 211 in the risk manual. They start with Underweight (Women) and end with Elevated Blood Levels.

The Underweight, Overweight, Short Stature and Weight Grain risks are auto-calculated by the computer. Low hemoglobin is also automatically assigned by the computer. However, since there are multiple definitions for these risks, the computer may only auto-calculate a portion of the risk definition. Remember, reading the risk definition will help you determine if the risk is applicable to the client and should be assigned.

Medical Risks

Medical risks are those that result from a current or previous medical condition or problem. These risks are found by asking the client the questions on the Risk Questionnaire. They are risks 301-382 in the Risk Manual.

Only two of these risks are auto-calculated by the computer. They are Closely Spaced Pregnancies and Pregnancy at a Young Age. All of the other risks must be assigned by you.

Dietary and Other Risks

Dietary risks are those that are related to what a client is eating or how a child is fed. Other social risks are also included in this section. These are risks 401-904.
Part 1: Measurement and Blood Work Risks
Below is a list of descriptions for some of the measurement and blood work risks. Read each description and then determine which risk should be assigned to the client by using your Nutrition Risk Factors Manual. Under each item, write the name of the risk and code. Put an asterisk (*) by the codes that are high risk.

Example: A 1-year-old child below the 5th percentile in weight for length based on growth charts
Answer: Underweight, 103*

1. A pregnant woman has gained more than 7 pounds in one month.

2. An infant weighing more than 9 pounds at birth.

3. An infant was born at 35 weeks gestation.

4. A pregnant woman who was overweight before her pregnancy has gained less than 2 pounds each month by the third trimester.

5. A child who has been diagnosed by a physician as being small for gestational age.

6. A pregnant woman who has lost more than 2 pounds during the second trimester.
Part 2: Medical Risks
Use your Risk Manual to match each risk factor below with the correct medical risk factor code (number). Put an asterisk (*) by the codes that are high risk.

1. ____A breastfeeding woman diagnosed by a physician as having high blood pressure.

2. ____An infant diagnosed by a physician with gastroesophageal reflux.

3. ____A woman who is 15 weeks pregnant and has not had any prenatal visits.

4. ____A pregnant woman who smokes cigarettes.

5. ____A breastfeeding woman having difficulty eating because of tooth decay.

6. ____A breastfeeding woman who reports cramps and diarrhea after eating dairy products.

7. ____A breastfeeding woman whose baby has a cleft lip.

8. ____A child diagnosed with severe asthma and needs daily medication.

9. ____A child diagnosed with an allergy to cow's milk.

10. ____A breastfeeding woman with a history of gestational diabetes.
Part 3: Dietary Risks
Use your Nutrition Risk Factors Manual to fill in the blanks for the risk definitions below:

1. **Routinely Feeding Sugar Drinks (425):**
   A child is routinely fed sugar containing fluids, such as _______________.

2. **Introducing Solids Before 4 Months (411):**
   Solid foods are added before _______ months of age.

3. **Improper dilution of formula (411):**
   Formula is over diluted or ____________.

4. **Inappropriate Milk Type/Milk Substitute (425):**
   (One of two possible definitions) A child less than ______ months old is primarily given ________ milk as their primary milk source.

5. **Infant up to six months of WIC mother or of a woman who would have been eligible during pregnancy (701):**
   (One of two possible definitions) An infant less than six months old whose mother was at ___________________________ during pregnancy.

6. **Homelessness (801):**
   (One of 5 possible definitions) Client lives in another person's home on a temporary basis for less than _______ days.

7. **Woman or primary caregiver with limited ability to make feeding decisions and/or prepare food (902):**
   (One of 4 possible examples) Less than or equal to ________ years old.

8. **Foster care (903):**
   Client has entered the foster care system or moved from one foster home to another during the past ________ months.

Use your Nutrition Risk Factors Guide to complete the following:

9. List 4 of the criteria for the risk **Feeding that Disregards Developmental Needs for infants.**
10. List 4 of the criteria for the risk **Feeding that Disregards Developmental Needs for children.**

11. List 4 of the 7 criteria for the risk **Routinely using Nursing Bottles, Cups or Pacifiers Improperly for infants.**

12. List 4 of the 6 criteria for the risk **Routinely using Nursing Bottles, Cups or Pacifiers Improperly for children.**

13. List 2 of the 4 criteria for the risk **Inappropriate Food/Drinks.**

**True or False:**

___ 14. An infant with a caregiver that has limited knowledge of how to prepare formula has Risk 411, Lack of Sanitation in Preparation - Handling Breastmilk/formula.

___ 15. Risk 501, Regression, may **only** be used if no other risk can be found.

___ 16. Risks 602 and 603, Breastfeeding Complications or Potential Complications are the same for infants and for breastfeeding women.

___ 17. A breastfeeding woman who is positioning her infant poorly is at risk for sore nipples and other breastfeeding problems and has risk 602, Breastfeeding Complications or Potential Complications.
How is A Nutrition Risk Documented?

Nutritional risks are identified at certification visits and other visits if they arise. All risks are documented or assigned in the Assign Risk Factors Screen of STARS.

For the nutrition risks listed below, a note should also be included on the assign risk factors screen in STARS to further explain why the risk was assigned to the client. See risk screen in STARS on the next page to see how to document a note for food allergies.

- History of Birth with a Nutrition-related Congenital or Birth Defect
- Nutrient Deficiency Diseases
- Gastrointestinal Disorders
- Renal Disease
- Cancer
- CNS Disorders
- Genetic and Congenital Disorders
- Inborn Errors of Metabolism
- Infectious Diseases
- Food Allergies
- Lactose Intolerance (if not diagnosed by a medical provider)
- Eating Disorders (if not diagnosed by a medical provider)
- Recent Major Surgery, Trauma, Burns
- Other Medical Conditions
- Developmental Delays, Sensory or Motor Disabilities Interfering w/Ability to Eat
- Dental Problems
- Substitute for Breastmilk or Formula
- Routinely using Bottles, Cups or Pacifiers Improperly
- Inappropriate Food/Drinks
- Introducing Solids Before 4 Months
- Feeding that Disregards Developmental Needs
- Improper Dilution of Formula
- Limiting Exclusive Breastfeeding
- Lack of Sanitation -Handling Breastmilk/Formula
- Inappropriate Milk Type/Milk Substitute
- Routinely Feeding Sugar Drinks
- Eating Non-food Items - Pica
- Regression
- Breastfeeding Complications
- Infant Born of Woman with Mental Retardation, Alcohol, Drug Abuse
- Woman, or Infant/Child of Primary Caregiver with Limited Ability
Professional Discretion High Risk

Occasionally you may feel that a client should be seen by the nutritionist even though they do not have a risk that is designated as high risk. You can indicate this by checking the Professional Discretion High Risk check box on the Risk Screen in STARS. You also need to write a short note indicating why you feel the client needs to be seen by the nutritionist. This will help her provide the appropriate counseling to the client. See the STARS screen below.
6 – 3 What is a Nutrition Assessment?

**Objectives**

After completing this section, you will be able to:

- Understand and identify the tools used to complete a full nutrition assessment.
- Complete a full nutrition assessment.
- Identify characteristics that make a quality nutrition assessment.

**Overview**

In the previous sections in the chapter you learned about what a risk is, what the definitions of the risks are and how to assign them. In this section you will learn what goes into completing a quality full nutrition risk assessment.
What is a full Nutrition Assessment?

A full nutrition assessment is an assessment through which all applicable risks are identified through a combination of all of the following:

▪ Anthropometric and hematological evaluation
▪ Current and past history of medical conditions
▪ Dietary deficiencies and problems
▪ Breastfeeding status or issues and
▪ Social problems

This is accomplished by asking questions from the Nutrition Assessment Questionnaires, completing the Health Interview Screen in STARS and accurately measuring and recording anthropometrics and hematological data.

What is a quality Nutrition Assessment?

Ideally, a nutrition assessment consists of identifying each risk or condition applicable to the client through careful, yet systematic data collection and questioning. The ultimate goal is to identify and record the client’s needs in a prioritized manner so they can be addressed through nutrition education and to facilitate the continuity of care throughout subsequent WIC visits.

The process of a quality Nutrition Assessment includes:

1. Using a proficient approach to collect essential information.
2. Building rapport through communication.
3. Using critical thinking to compile information, draw appropriate conclusions and relationships, and prioritize issues.
4. Documenting information and conclusions concisely and accurately.
5. Providing follow-up from previous nutrition assessments.

Why complete a full Nutrition Assessment?

A full nutrition assessment is essential to ensure that all applicable risks have been found. This will aid in the development of nutrition education topics. However, not all essential nutrition assessment information has a corresponding nutrition risk code. This information will not be used to
determine Program eligibility, but is necessary for tailoring nutrition education to meet the needs of the client. A note should be entered into the Notes screen in STARS noting this information. For examples, a pregnant woman experiencing nausea and vomiting would not in itself be a risk, but should be noted in STARS and education should be provided.

### What if Nutrition Assessment yields no risks?

If full nutrition assessment is completed and no risks have been identified, including Risk of Regression (501), there are two risks available for assignment depending on the client’s category and age.

- **Failure to Meet Dietary Guidelines for Americans (401)**
  - Women and
  - Children 24 months of age and older when no other risks have been identified.

- **Dietary Risk 4-23 Months (428)**
  - Infants 4 months and older and
  - Children 23 months and younger

These two risks can only be assigned after a complete assessment has been done and no other risks have been identified.
Answer Key to Self-Evaluations

Self Evaluation 06 - 1:
1. Measurements, laboratory tests, Nutrition Assessment Questionnaires and Health Interview Screen.
2. See your director
3. All client risks must be assigned. The client must have at least one risk to be eligible for the WIC Program.
4. Each risk for each category is assigned a priority number from one to six. One is the highest priority and six is the lowest priority. Risks with a high priority are more critical to the growth and development of the woman or child than risks with a lower priority. Priorities are used when a local agency has reached its maximum participation level and a waiting list must be started
5. High risk clients have nutritional needs that require the intervention of a Registered Dietitian or nutritionist.

Self Evaluation 06 - 2:

Part 1:
1. High Maternal Weight Gain, 133
5. Large for Gestational Age, 153
6. Prematurity, 142*
7. Low Maternal Weight Gain, 131*
8. Small for Gestational Age, 151*
9. Weight Loss During Pregnancy, 132*

Part 2:
1. (d) 345
2. (e) 342*
3. (c)334
4. (j) 371
5. (h) 381
6. (i) 355
7. (f) 339
8. (a) 360*
9. (g) 353
10. (b) 303

Part 3:
1. Soda, Gatorade, Kool-Aid, Sunny Delight, Hi-C, Capri-Sun, Sweetened Tea, etc
2. 4
3. Under diluted
4. 24, lowfat, fatfree or reduced fat
5. Nutritional risk
6. 365
7. 17
8. 6
10. Any listed on page 110 of the Nutrition Risk Factors Manual
14. T
15. T
16. F
17. T
Unit 06: Nutrition Risks

Unit Assessment

DIRECTIONS: Write in the correct answer. ‘F’ for False or ‘T’ for True.
(4 points each)

_____ 1. Nutritional risks can be found through measurements of height and weight, laboratory
tests, diagnoses of certain medical conditions and by assessing dietary practices.

_____ 2. If a nutritional risk is found at a monthly visit (after certification), it does NOT have
to be entered into the computer.

_____ 3. WIC clients must receive nutrition education at least once during a six-month
certification.

_____ 4. No nutritional risks were found when certifying a child, so the child is ineligible for
WIC.

_____ 5. A note must be entered for risks that have multiple definitions.

_____ 6. The WIC computer automatically calculates some of the nutritional risks based on the
information that is entered into the system during a certification or recertification.

_____ 7. Clients that are high risk should be referred to a nutritionist within 90 days of
certification for more in-depth counseling.

_____ 8. A postpartum woman is auto-assigned the risk overweight. Since the client has a risk
the Nutrition Assessment Questionnaire does NOT have to be used to find additional
risks.

_____ 9. In the Nutrition Risk Factors Manual table of contents, high risks are shaded.

DIRECTIONS: Use your Nutrition Risk Factors Manual to answer the remaining questions.
(4 points per risk)

10. A three month old infant is certified on the program and the following information is
discovered:
   a. Bottle is propped at bedtime.
   b. Required a special formula authorization for Nutramigen because of
gastroesophageal reflux.
c. Mother is feeding infant cereal in the bottle without instruction from the doctor.
d. Infant is at the 90th percentile on the growth chart in weight for length.

List all of the risks you can find for the infant described above.

11. An 18 month old child is recertified on the program and the following information is discovered:
a. Child is drinking two 8-ounce glasses of juice a day.
b. Child is at the 10th percentile in length for age on the growth chart.

List all of the risks you can find for the child described above.

12. A Breastfeeding woman is certified on the program and the following information is discovered:
a. She has high blood pressure.
b. She tells you she is lactose intolerant and reports diarrhea after drinking milk.
c. She had Gestational Diabetes during a previous pregnancy.
d. She chews smokeless tobacco.

List all of the risks you can find for the woman described above.

13. A woman is 24 weeks pregnant and is certified on the WIC program. The following information is discovered:
a. Her last baby weighed 9 pounds 4 ounces at birth.
b. Her weight gain is in the recommended range on the weight gain grid, but her weight has stayed the same over the past 4-week period.
c. Her first child was born at 35 weeks gestation.

List all of the risks you can find for the woman described above.
14. A woman with a 4 day old infant is certified on the program as a postpartum client. At certification, the following information is discovered:
   a. She had a C-section.
   b. She recently moved in with her sister because she could not afford rent. She thinks she will only stay with her sister temporarily (for a few months) until she can find a place she can afford.

List all of the risks you can find for the woman described above.

Directions: Select the correct answer (4 points)
15. Which of the following are good ways to assign all of the applicable risks to a client?
   
   a. Scroll through the risks in the computer during the certification.
   b. Ask the client questions if you do not have enough information to decide about certain risks.
   c. Use the Nutrition Assessment Questionnaires.
   d. Check the Nutrition Risk Factors Manual if you are uncertain about the definition of a risk.
   e. c and d
   f. a, b and d
   g. b, c and d
   h. All of the above.