Oregon WIC Training

Nutrition Risk Module

Oregon Health Authority

WIC OREGON

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1-1 Introduction to Nutrition Risks

Prior to completing this module, read CPA Guide Chapter 4-1.

Overview

WIC participants must have a nutrition need or risk to qualify for WIC services**.** WIC's goal is to use these services to provide nutrition education, nutritious foods, breastfeeding support and community referrals to address participant risks and help improve their health outcomes.

WIC serves participants at an important period of growth and development in their lives that has the potential to shape long term health practices and health outcomes.

Nutrition risks are key to personalizing WIC services to meet individual needs. Each participant has a certification appointment to identify their individual nutrition risks. Many times, more than one risk will be identified. These risks are the basis for the individualized services that WIC offers.

In the WIC clinic, nutrition risks are used to:

- Certify that participants are eligible for WIC
- Focus participants' nutrition education on their needs
- Identify which WIC foods best meet the participants' needs
- Determine the participants' risk level
- Identify appropriate referrals for each participant

What are nutrition risks?

A **nutrition risk** is a health problem, medical condition, diet deficiency or other issue that can affect the health and nutrition status of a participant.

Nutrition risk criteria are standardized throughout the United States. The federal WIC office at USDA requires that that every WIC program uses the same risks with the same risk numbers and the same risk criteria. Risks are researched and recommended

by a national group of health professionals. This group provides annual updates that are implemented nationally.

Over 100 different risks have been identified by USDA. This training module will describe each in detail.

Risks can be classified into five groups:

- **A** = Anthropometrics
- **B** = Biochemical
- **C** = Clinical/Medical
- **D** = Dietary
- **E** = Environmental

Risk Group:	Description:	Risks related to:
Anthropometric 100's	Based on measurement of physical size	Height Weight Head Circumference Rate of growth or prenatal weight gain
Biochemical 200's	Based on blood tests	Anemia Blood lead level
Clinical 300's	Based on health history and current health status	Chronic illnesses Birth problems Genetic conditions
Dietary 400's	Based on feeding behaviors and daily intake	Inappropriate nutrition practices
Environmental 500 to 900's	Based on social and safety factors that influence nutrition	Smoking Substance use Foster care Domestic violence

How are risks assigned?

Each participant is assigned nutrition risks during the certification appointment. These nutrition risks are selected based on a complete assessment of the participant's medical data and health information. The data system is used to record this information and to document the risk factors for each participant.

Risk factors can be automatically generated by the data system based on information entered by the certifier or manually selected by the certifier.

1. **Data system assigned**
   - Risks are automatically selected based on information entered on the medical data screen or on the questionnaires.
   - It is very important for the certifier to enter information correctly so that risks will be accurately assigned.
   - Certifiers must always check the data system assigned risks to confirm accurate assignment.

Examples of data system assigned risks:

- The certifier enters the height and weight of a participant in the data system. The data system calculates that the individual is underweight and displays the underweight risk factor.

- The certifier enters a hemoglobin value in the data system. The data system identifies the value is below recommended levels and displays the low hemoglobin risk.

2. **Certifier assigned**
   - Risks are manually selected in the data system by the certifier based on information learned during the certification.
   - Risks are often certifier selected during completion of the health history and diet assessment questionnaires.

Examples of certifier assigned risks:

- During completion of the health history, a woman reports that she has been diagnosed with a medical condition. The certifier selects the risk for that medical condition from the risk list in the data system then adds any required documentation for that risk in the participant's record.

- During the diet assessment, a mother tells the certifier that her child has been diagnosed with food allergies. The certifier discusses the specific allergies with the mother then selects the appropriate risks in the data system and documents the specific food allergies in the participant's record.

After all risks have been assigned, the certifier must do a final review to make sure all risks were correctly selected. Risks can be added or removed as needed.

What information is used to assign risks?

The information used to complete an assessment of nutrition risk comes from several places:

1. **Information collected by WIC staff**

   WIC staff collects the information needed to assign the risk as part of the certification process.

Example:

- WIC staff weigh and measure participants. This provides the information needed to assign anthropometric risk factors.

2. **Historical data**

- For participants who are being recertified, WIC has information from previous certifications.

> **Example:**
>
> - The data system keeps track of an infant's growth over several visits to WIC. This information is used to determine if the infant is growing at the correct rate for their age.

3. **Information from a health care provider**

- WIC participants might bring medical history information from their health care provider which could be used to assign a risk.

> **Example:**
>
> - An infant has medical documentation for a special formula which also lists information about the infant's medical diagnosis. This information is then used to enter a clinical risk.

4. **Self-reported by participant**

- WIC allows participants to self-report that their doctor has diagnosed them with a health condition.
- It is important to determine that a doctor has diagnosed a health condition, not that the individual just believes that the condition exists.
- It is **not** required to have a note from the doctor stating the diagnosis.
- Specific questions to ask the participant when they self-report a health condition include:
    - Are you seeing a doctor for the condition?
    - How long have you had this condition?
    - What type of medication are you taking for the condition?

Has your doctor prescribed a special diet for this condition?

Example:

Here is an example of how the certifier can find out more information about a self-reported medical condition:

Joleena is at WIC to be enrolled for her pregnancy. This is part of her conversation with the certifier during the certification.

- **Certifier***:* Do you have any medical or health problems?
- **Joleena***:* Yes, I have high blood pressure.
- **Certifier**: I see, what can you tell me about your high blood pressure?
- **Joleena**: Last week I used the machine at Walgreen's and it said my blood pressure was high.
- **Certifier**: When was the last time you met with your doctor?
- **Joleena**: I haven't seen the doctor in about a month.
- **Certifier**: When is your next appointment with the doctor?
- **Joleena**: Tomorrow.
- **Certifier**: It is important to have this concern verified by your doctor. Please let us know if your doctor says that your blood pressure is too high.
- **Joleena**: OK.
- **Certifier**: Do you have any other health or medical problems?
- **Joleena**: No.

Result: Although Joleena was enrolled on WIC with other risks, she would not qualify for the hypertension risk because hypertension had not been diagnosed by a health care provider.

However, if Joleena had said: "My doctor said at my last appointment that I have high blood pressure," the certifier would have documented the diagnosis in her record and assigned the hypertension risk.

Resources

As you learn about the nutrition risks, there are several resources at the end of the module that may be helpful.

- More Information about Medical Conditions – This resource can be used to learn more about some health and medical conditions.
- Job Aid: Risk Summary–This job aid gives an overview of all risks including the risk number and name, risk level, risk category, documentation needed and how it is assigned.
- Job Aid: Disease Names and Risks – This job aid connects specific medical conditions with their appropriate risk number.
- Job Aid: List of Risk Numbers and Names – This job aid lists the risk by name and number in risk groups.

Additional resources can be found in the Oregon WIC Policy Manual:

- WIC Policy 675 – Risk Criteria Codes and Descriptions – This policy gives a complete list of the nutrition risks and the criteria for assigning each risk.
- WIC Policy 661–Appropriate Counseling for Risk Levels –This policy provides a list of medium and high risks and describes counseling provided for different risk levels.

To learn more about how WIC services improve participant health outcomes, see additional information on the USDA Website.

Summary

Assigning appropriate nutrition risks is a key to tailoring WIC's services to individual participants. A full assessment of the participant's health and nutrition status gives a complete picture of their nutrition needs. When all risks are identified, nutrition education can be focused in ways that will best assist the participant in improving their health and achieving desired health outcomes.

Learning activity

1. What are the five groups of nutrition risks?

2. What are the two ways risks are assigned?

3. What information is used to assign risks?

4. What type of information requires careful questioning by the certifier?

5. Is it possible that one participant would have more than one risk? Why or why not?

6. Who must confirm that all correct risks have been assigned?

1-2 Risk Information Sheets

Overview

Risk information sheets contain a description of each risk and the criteria that must be followed for assignment of that risk to a participant. Risk information sheets for all USDA approved risks are included in this **Nutrition Risk** module.

The **Nutrition Risk** module is divided into chapters by participant category. Each chapter includes links to the risk information sheets for each of the nutrition risks specific to that category of WIC participant. Read each information sheet for that category then complete the learning activity.

Risk sheet description

Here is the template for the risk information sheet with a description of each field:

Risk number – Risk name

Risk description

The criteria that must be present for the risk to be assigned.

Reason for risk

A brief overview of why the condition is a nutrition risk.

Category	Indicates the group or groups of participants that this risk applies to: Women, Pregnant Women, Postpartum Women, Infants, Children, All
Risk level	Identifies the risk level that will be assigned by the data system for this risk: Low, Medium, High

At risk if:	Specifies the required criteria for assigning this risk
Not at risk if:	Clarifies situations where this risk would not be applicable
How is risk assigned?	Indicates if this risk is certifier selected or data system assigned
Additional documentation	Identifies information that must be documented in the data system when this risk is assigned. This includes the mandatory referral of high risk participants to the RD. Required documentation for high risk participants includes a high risk care plan that is completed by the RD.

Risk 347 - Cancer

Risk description

Cancer has been diagnosed by a health care provider. This diagnosis can be self-reported. The current condition or treatment must be severe enough to affect nutrition status.

Reason for risk

Individuals with cancer are at significant health risk and may be at increased nutrition risk depending on the type and stage of the disease and the progression or type of treatment.

Category	All
Risk level	High
At risk if:	Health care provider diagnosed cancer OR Participant is being treated for cancer such as with radiation or chemotherapy
Not at risk if:	Cancer has not been diagnosed by a health care provider OR Cancer treatment has ended and the participant is in remission
How is risk assigned?	Certifier selected from risk list in the data system.
Additional documentation	Document the specific type of cancer or treatment in the data system. Referral to the RD is required.

Summary

The Nutrition Risk module contains risk information sheets for each WIC risk. Risk information sheets provide important guidance as to when and how a risk should be assigned to a participant. Greater familiarity with the risks will make it easier to assign risks quickly and accurately.

Learning Activity

Refer to the sample risk information sheet above:

1. What category would a participant need to be in to qualify for this risk?

2. What criteria needs to be present for this risk to be assigned?

3. What, if any, special documentation needs to be included in the data system?

2-1 Risks for All Participants

Overview

After completing this chapter, you will be able to assess and assign nutrition risks that apply to all categories of participants. The Anthropometric and Dietary risk groups do not apply to all categories as each category has different needs in these areas. These risk groups will be covered in later chapters. The following table lists the risks for all participants:

Risk Group:	Description:
Anthropometric	---
Biochemical	☐ 201A/B - Low Hemoglobin or Hematocrit ☐ 211 - Elevated Blood Lead Levels
Clinical/Medical	☐ 341 - Nutrient Deficiency or Disease ☐ 342 - Gastrointestinal Disorders ☐ 343 - Diabetes Mellitus ☐ 344 - Thyroid Disorders ☐ 345 - Hypertension and Prehypertension ☐ 346 - Renal Disease ☐ 347 - Cancer ☐ 348 - Central Nervous System Disorders ☐ 349 - Genetic and Congenital Disorders ☐ 351 - Inborn Errors of Metabolism ☐ 352A - Infectious Diseases - Acute ☐ 352B - Infectious Diseases - Chronic ☐ 353 - Food Allergies ☐ 354 - Celiac Disease ☐ 355 - Lactose Intolerance ☐ 356 - Hypoglycemia ☐ 357 - Drug Nutrient Interactions ☐ 359 - Recent Major Surgery, Physical Trauma or Burns ☐ 360 - Other Medical Conditions

Risk Group:	Description:
	☐ Risk 361 – Mental Illnesses (does not apply for infants) ☐ 362 - Developmental, Sensory or Motor Delays Interfering with Eating ☐ 381 - Oral Health Conditions
Dietary	---
Environmental	☐ 502 - Transfer of Certification ☐ 801 - Homelessness ☐ 802 - Migrancy ☐ 901 - Recipient of Abuse ☐ 902 – Woman or Infant/Child of Primary Caregiver with Limited Ability to Make Feeding Decisions and/or Prepare Food ☐ 903 - Foster Care ☐ 904 - Environmental Tobacco Smoke Exposure

To complete these chapters, you must read each of the risk information sheets. If you are reading this on a computer, click on the title of each risk to open the link. If you are reading this as a printed version, locate the risk information sheets at the end of the printed module.

For more information on specific health and medical conditions, refer to *More Information about Medical Conditions* in the resource section.

Learning activity

Using the table above, write your answer to the following question:

Which two of the risk groups do not apply to all categories?

2-2 Biochemical risks for all participants

Biochemical risks are associated with the results of blood tests for either hemoglobin (blood iron) or lead levels. Read the risk information sheet for each of the following risks:

- ☐ 201A/B – Low Hemoglobin or Hematocrit
- ☐ 211 – Elevated Blood Lead Levels

Learning activity

Using the risk information sheets listed above as a reference, write your answers to the following questions.

1. Is a referral to the RD required for Risk 211? Why or why not?

2. Which sub-category (A or B) of Risk 201 has a high risk and requires RD referral?

2-3 Clinical risks for all participants based on medical diagnoses

Participants with these risks have been diagnosed by a health care provider with serious health conditions. Read the risk information sheet for each of the following risks:

- ☐ 341 Nutrient Deficiency or Disease
- ☐ 342 Gastrointestinal Disorders
- ☐ 343 Diabetes Mellitus
- ☐ 344 Thyroid Disorders
- ☐ 345 Hypertension and Prehypertension
- ☐ 346 Renal Disease
- ☐ 347 Cancer
- ☐ 352A Infectious Diseases - Acute
- ☐ 352B Infectious Diseases - Chronic
- ☐ 356 Hypoglycemia
- ☐ 360 Other Medical Conditions
- ☐ 361 Mental Illnesses
- ☐ 381 Oral Health Conditions

Learning activity

Using the risk information sheets for reference, write your answers to the following questions:

1. What is the key information that you need to know if a parent is reporting that their child has one of these medical conditions?

2. Which of these risks require additional documentation in the data system?

3. Which of these risks require a high-risk referral to a WIC nutritionist?

4. Avery is a postpartum woman with a 6-week-old baby. She was just diagnosed with breast cancer. Would she qualify for a nutrition risk?
   ☐ YES – RISK # ☐ ☐ NO

5. Savannah is a 2-year-old. When she was a baby, she had an infection in her intestines which required removal of half of her small intestine. Would she qualify for a nutrition risk?
   ☐ YES – RISK # ☐ ☐ NO

6. Scarlett is a 4-year-old recently diagnosed with Type 1 diabetes. Would she qualify for a nutrition risk?
   ☐ YES – RISK # ☐ ☐ NO

7. Alexandra is a pregnant woman who has been taking medication for high blood pressure and hypothyroidism for the past 2 years. Would she qualify for a nutrition risk?
   ☐ YES – RISK # ☐ ☐ NO

8. Sarah is currently being treated by her physician for a kidney infection. Would she qualify for a nutrition risk?
   ☐ YES – RISK # ☐ ☐ NO

9. Anna is a pregnant woman with asthma that requires occasional medication. Would she qualify for a nutrition risk?
   ☐ YES – RISK # ☐ ☐ NO

10. Clark is a 3-year-old child whose guardian reports that he has been diagnosed with rickets. Would he qualify for a nutrition risk?
    ☐ YES – RISK # ☐ ☐ NO

11. Darla is a pregnant woman who has two missing molars on one side of her mouth. She reports that it makes eating difficult. Would she qualify for a nutrition risk?
    ☐ YES – RISK # ☐ ☐ NO

12. Andrew is 19 months old. His mother tells you that he has had bronchitis 4 times in the past 6 months. Would he qualify for a nutrition risk?
    ☐ YES – RISK # ☐ ☐ NO

13. Clara is postpartum woman being treated for HIV. Would she qualify for a nutrition risk?
    ☐ YES – RISK # ☐ ☐ NO

2-4 Clinical risks for all participants based on genetic conditions

Participants with these risks have health issues that they were born with or inherited and are often ongoing. There are multiple conditions associated with each risk so the specific health concern for each participant must be documented in the data system. Read the risk information sheet for each of the following risks:

- ☐ 348 – Central Nervous System Disorders
- ☐ 349 – Genetic and Congenital Disorders
- ☐ 351 – Inborn Errors of Metabolism
- ☐ 362 – Developmental Delays, Sensory or Motor Delays Interfering with the Ability to Eat

Learning activity

Using the risk information sheets as a reference, write the risk number that would be assigned to a participant with each of these conditions.

Risk Number	**Condition:**
	Spina bifida
	Developmental Delays
	Cleft Palate
	PKU
	Autism
	Multiple Sclerosis
	Galactosemia
	Down syndrome
	Epilepsy
	Sickle Cell Anemia

Risk Number	Condition:
	Brain Damage
	Thalassemia major
	Cerebral Palsy
	Parkinson's

2-5 Clinical risks for all participants related to food

The risks in this group pertain to food intolerance or allergy. Participants with these risks are unable to eat specific foods. Read the risk information sheet for each of the following risks:

- ☐ 353 – Food Allergies
- ☐ 354 – Celiac Disease
- ☐ 355 – Lactose Intolerance

Learning activity

Using the risk information sheets as a reference, write your answers to the following questions:

1. Jovana is pregnant. She tells you that she can't drink milk because it gives her stomach cramps and diarrhea. She can eat small amounts of cheese. Would she qualify for a nutrition risk?
   ☐ YES – RISK No. ☐ ☐ NO

2. Jordan is three years old. His mother tells you that he was diagnosed with gluten enteropathy last month. Would he qualify for a nutrition risk?
   ☐ YES – RISK No. ☐ ☐ NO

3. Jose is two years old. His father tells you that last month he had a severe allergic reaction to peanuts. On the advice of their doctor, they are closely watching his diet to make sure he doesn't eat anything that contains peanuts. Would he qualify for a nutrition risk?
   ☐ YES – RISK No. ☐ ☐ NO

2-6 Clinical risks for all participants related to other conditions

Participants with these risks have a current health concern that does not require diagnosis by a health care provider. Specific conditions that qualify for these risks must be documented in the data system. Read the risk information sheet for each of the following risks.

- ☐ 357 – Drug Nutrient Interactions
- ☐ 359 – Recent Major Surgery, Physical Trauma or Burns

Learning activity

Using the risk information sheets as a reference, write your answers to the following questions:

1. Which of these risks is a high-risk and requires referral to the RD?

2. Andres, a 5-month-old baby, had heart surgery last month. Would he qualify for a nutrition risk?
   ☐ YES – RISK # ☐ ☐ NO

3. Austin is 13 months old and is taking antibiotics for an ear infection. His mother tells you that he doesn't seem as hungry as usual, but he is still eating. Would he qualify for a nutrition risk?
   ☐ YES – RISK # ☐ ☐ NO

Kallie had a C-section when she delivered her baby three weeks ago. She is at WIC for her postpartum recertification appointment. Would she qualify for a nutrition risk?

☐ YES – RISK # ☐ ☐ NO

2-7 Environmental risks for all participants

These risks are related to social and safety factors that can impact a participant's nutrition and health status but are not due to a specific health problem. Read the risk information sheets for each of the following risks:

- ☐ 502 – Transfer of Certification
- ☐ 801 – Homelessness
- ☐ 802 – Migrancy
- ☐ 901 – Recipient of Abuse
- ☐ 902 – Woman or Infant/Child of Primary Caregiver with Limited Ability to Make Feeding Decisions and/or Prepare Food
- ☐ 903 – Foster Care
- ☐ 904 –Environmental Tobacco Smoke Exposure

Learning activity

Using the risk information sheets as a reference, write your answers to the following questions:

1. Wilma is a pregnant woman who is transferring into your agency in the middle of her certification period. Her transfer information does not list any nutrition risks. Which risk code would you enter into the data system?

2. Weston is a child who was recently taken into foster care because he was physically abused by his family. Which 2 risks would he qualify for?

3. Zoe is an infant living in a home where the father reports that he only smokes outside. Would she qualify for a nutrition risk?
   ☐ YES – RISK # ☐ ☐ NO

4. Abby is a pregnant woman enrolling in WIC. She reports that she does not have a physical address because she is living out of her car. Would she qualify for a nutrition risk?
   ☐ YES – RISK # ☐ ☐ NO

5. Michael is a 4-year-old child on WIC. He and his family live in the area and work on farms during the growing season. Would he qualify for a nutrition risk?
   ☐ YES – RISK # ☐ ☐ NO

6. Heather is 14 years old and pregnant. She lives with her mom who shops and makes all of her meals because she has never cooked. Would she qualify for any of these nutrition risks?
   ☐ YES – RISK # ☐ ☐ NO

7. Would all children born to mothers who are 16 years old qualify for Risk 902? Why or Why not?

8. Wade is a 4-week-old baby. His mother, Wilma, is developmentally delayed. She lives with her family and Wilma's mother is the primary caregiver. Would Wade qualify for any of these risks?

   ☐ YES – RISK # ☐ ☐ NO

2-8 Chapter Test

Complete the following test to demonstrate understanding of risks that apply to all participants. Risk information sheets may be used for reference just as in a typical clinic setting.

After you have completed the test, talk it over with your training supervisor.

Use the information provided about each participant and the risks discussed in this chapter to complete the table following each example:

1. Samuel:
   - He is 2 years old with numerous health problems.
   - He is being treated by his physician for a cancerous brain tumor.
   - The cancer treatment causes chronic high blood pressure.

What risks would be assigned?	Risk #s:
Additional documentation required?	Yes No
Referral to the RD required?	Yes No

2. Tina:
   - She is a postpartum woman with hyperthyroidism who is having gallbladder surgery next month.
   - She also has a bladder infection treated with antibiotics.

What risks would be assigned?	Risk #s:
Additional documentation required?	Yes No
Referral to the RD required?	Yes No

3. Beatriz:
   - She is a pregnant woman who was born with a cleft lip that was repaired when she was a child.
   - She reports that her doctor found out that her blood pressure is regularly going too low.
   - She also requires daily breathing treatment for asthma.

What risks would be assigned?	Risk #s:
Additional documentation required?	Yes No
Referral to the RD required?	Yes No

4. Alexis:
   - She is a breastfeeding woman who has had Type 1 diabetes since she was 5 years old.
   - She is also being treated for tuberculosis.
   - Her baby is 5 weeks old.

What risks would be assigned?	Risk #s:
Additional documentation required?	Yes No
Referral to the RD required?	Yes No

5. Brian:
   - He is 3 years old and recently moved into a transitional shelter with his family while waiting for an apartment to become available.
   - He was born with cerebral palsy.

What risks would be assigned?	Risk #s:
Additional documentation required?	Yes No
Referral to the RD required?	Yes No

6. Betty:
   - She recently immigrated to the United States.
   - She is 4 years old and her doctor has diagnosed her with vitamin A deficiency and gluten sensitive enteropathy.

What risks would be assigned?	Risk #s:
Additional documentation required?	Yes No
Referral to the RD required?	Yes No

7. Maria
   - She was in a car accident last year that left her with minor brain damage.
   - She has difficulty chewing foods and uses a nutritional supplement drink three times a day.
   - She is 6 weeks postpartum.

What risks would be assigned?	Risk #s:
Additional documentation required?	Yes No
Referral to the RD required?	Yes No

8. Martina:
   - She is a pregnant 20-year-old woman with PKU.
   - Her husband works in seasonal agriculture and they are staying at a farm workers camp.

What risks would be assigned?	Risk #s:
Additional documentation required?	Yes No
Referral to the RD required?	Yes No

9. Justin:
   - He is 4 weeks old and just went into foster care.
   - His foster mother is requesting a soy formula because he spits up when he drinks milk-based formula.
   - Mom reports that he frequently has gas, but he does not have diarrhea.

What risks would be assigned?	Risk #s:
Additional documentation required?	Yes No
Referral to the RD required?	Yes No

10. Camille:
   - She is being recertified as a non-breastfeeding postpartum woman.
   - She is taking a medication for ADHD that makes her not feel hungry.
   - She tells you that she gets a rash around her mouth when she eats bread or crackers and wonders if she is allergic to wheat.

What risks would be assigned?	Risk #s:
Additional documentation required?	Yes No
Referral to the RD required?	Yes No

11. Aidan:
   - He is 3 years old and his Mom reports that he has trouble eating hard foods.
   - He has been diagnosed with baby bottle tooth decay but not treated because the family does not have access to a dentist.

What risks would be assigned?	Risk #s:
Additional documentation required?	Yes No
Referral to the RD required?	Yes No

12. Katrina:
    - She is pregnant.
    - She was living with her boyfriend, but just moved out because he was physically abusive.
    - She is now living in a foster home.

What risks would be assigned?	Risk #s:
Additional documentation required?	Yes No
Referral to the RD required?	Yes No

13. Shereen:
    - She is 4 years old.
    - Her hemoglobin is 9.0 and her blood lead level is 10.3.

What risks would be assigned?	Risk #s:
Additional documentation required?	Yes No
Referral to the RD required?	Yes No

14. Jacquie:
    - She has not been on WIC before.
    - She is breastfeeding her 3-month-old baby.
    - She tells you that her doctor diagnosed her with lupus 2 months ago.

What risks would be assigned?	Risk #s:
Additional documentation required?	Yes No
Referral to the RD required?	Yes No

3-1 Risks for All Women

Overview

After completing this chapter, you will be able to assess and assign nutrition risks that apply to all women, both pregnant and postpartum. Additional risks specific to pregnant women are covered in Chapter 4. Additional risks specific to postpartum women are covered in Chapter 6. The following table lists the risks for all women:

Risk Group:	Description:
Anthropometric	---
Biochemical	---
Clinical/Medical	☐ 303 - History of Gestational Diabetes ☐ 304 - History of Preeclampsia ☐ 311 - History of Preterm or Early Term Delivery ☐ 312 - History of Low Birth Weight ☐ 321 - History of Fetal or Neonatal Loss ☐ 331 - Pregnancy at a Young Age ☐ 332 - Closely Spaced Pregnancy ☐ 335 - Multiple Fetus Pregnancy ☐ 337 - History of a Birth of a Large for Gestational Age Infant ☐ 339 - History of a Birth with a Congenital Birth Defect ☐ 358 - Eating Disorders ☐ 361 - Mental Illnesses (also applies for children) ☐ 601 - Breastfeeding Mother of Infant at Nutritional Risk ☐ 602 - Breastfeeding Complications or Potential Complications Woman

Risk Group:	Description:
Dietary	☐ 401 - Presumed Dietary Eligibility for Women and Children (ages 2-5 years) ☐ 427 – Inappropriate Nutrition Practices for Women ➢ 427.1 - Inappropriate Use of Dietary Supplements ➢ 427.2 -Eating Very Low Calorie or Nutrient Diet ➢ 427.3 – Pica - Women ➢ 427.4 - Inadequate Iron, Iodine or Folic Acid Supplementation
Environmental	☐ 371 - Nicotine and Tobacco Use ☐ 372 - Alcohol and Substance Use ☐ 902 – Women or Infant/Child of Primary Caregiver with Limited Ability to Make Feeding Decisions or Prepare Food

To complete these chapters, you must read each of the risk information sheets. If you are reading this on a computer, click on the title of each risk to open the link. If you are reading this as a printed version, locate the risk information sheets at the end of the printed module.

For additional information on specific health and medical conditions, refer to More Information about Medical Conditions in the resource section.

Learning activity:

Write your answer to the following question:

1. Many of the clinical risks address a woman's medical history. Why would this be important information?

3-2 Clinical risks for all women based on health history

These risks refer to a condition a woman had during a previous pregnancy. Read the risk information sheet for each of the following risks:

- ☐ 303 History of Gestational Diabetes
- ☐ 304 History of Preeclampsia
- ☐ 311 History of Preterm or Early Term Delivery
- ☐ 312 History of Low Birth Weight
- ☐ 321 History of Fetal or Neonatal Loss
- ☐ 337 History of a Birth of a Large for Gestational Age Infant
- ☐ 339 History of a Birth with a Congenital Birth Defect

Learning activity

Using these risk information sheets as a reference, write your answers to the following questions:

1. What is the difference between assigning these risks for a pregnant woman vs. a postpartum woman?

2. Molly is being recertified as a breastfeeding woman and was diagnosed with gestational diabetes during her pregnancy. Would she qualify for any of these nutrition risks?

   ☐ YES – RISK # ☐ ☐ NO

3. Mae is being recertified as a non-breastfeeding woman. Her baby was born two weeks ago and weighed 5 pounds 8 ounces. Would she qualify for any of these nutrition risks?

   ☐ YES – RISK # ☐ ☐ NO

4. Margaret is pregnant with her third child. Her first baby was born at 36 weeks due to preeclampsia. Would she qualify for any of these nutrition risks?

   ☐ YES – RISK # ☐ ☐ NO

5. Marlena is being certified as a breastfeeding woman. She was pregnant with twins, but at 21 weeks miscarried one of the twins. The second baby survived and is now 2 weeks old and breastfeeding. Would she qualify for any of these nutrition risks?

   ☐ YES – RISK # ☐ ☐ NO

6. Lenore was pregnant but miscarried at 11 weeks gestation. Would she qualify for any of these nutrition risks?

   ☐ YES – RISK # ☐ ☐ NO

7. Linnea just gave birth to a baby who weighed 9 pounds 0 ounces. Would she qualify for any of these nutrition risks?

   ☐ YES – RISK # ☐ ☐ NO

8. Laura is being enrolled as a prenatal woman. Her first child was born with spina bifida. Would she qualify for any of these nutrition risks?

   ☐ YES – RISK # ☐ ☐ NO

3-3 Clinical risks for all women related to pregnancy

These risks are related to a woman's current or most recent pregnancy. Read the risk information sheets for each of the following risks:

- ☐ 331 Pregnancy at a Young Age
- ☐ 332 Closely Spaced Pregnancy
- ☐ 335 Multiple Fetus Pregnancy

Learning activity

Using the risk information sheets as a reference, write your answers to the following questions:

1. Katie is 15 years old and pregnant. Would she qualify for any of these nutrition risks?

   ☐ YES – RISK # ☐ ☐ NO

2. Katrina is two months pregnant with her third child. Her other children are 13 months and 2 ½ years old. Would she qualify for any of these nutrition risks?

   ☐ YES – RISK # ☐ ☐ NO

3. Kaylee is 19 years old and 7 months pregnant. This is her second pregnancy. She has a 30-month-old child. Would she qualify for any of these nutrition risks?

   ☐ YES – RISK # ☐ ☐ NO

4. Kiersten is pregnant with triplets. Would she qualify for any of these nutrition risks?

   ☐ YES – RISK # ☐ ☐ NO

3-4 Clinical risks for all women based on other conditions

These are other health conditions that apply to all women. Read the risk information sheet for each risk:

- ☐ 358 – Eating Disorders
- ☐ 361 – Mental Illnesses (also applies for children)
- ☐ 601 –Breastfeeding Mother of Infant at Nutrition Risk
- ☐ 602 –Breastfeeding Complications or Potential Complications for Women

Learning activity

Using the risk information sheets as a reference, write your answers to the following questions:

1. While you are enrolling Misha for her pregnancy, she tells you that she was diagnosed with bulimia last year. She says that she has stopped bingeing and purging since she found out she was pregnant, but that she is concerned that she will start again after delivery. Would she qualify for any of these nutrition risks?

   ☐ YES – RISK # ☐ ☐ NO

2. Valentina is in the office for her first postpartum visit and shares that she has been diagnosed with postpartum depression. She is on medication and is being followed by her health care provider. Would she qualify for any of these nutrition risks?

   ☐ YES – RISK # ☐ ☐ NO

3. During her postpartum appointment, Amelia reports that she is breastfeeding her infant with cleft palate and struggling with severe engorgement. Would she qualify for any of these nutrition risks?

☐ YES – RISK # ☐ ☐ NO

3-5 Dietary risks for all women

There are several dietary risks for pregnant and postpartum women that are considered "Inappropriate Nutrition Practices for Women." These risks identify nutrition practices that may result in impaired nutrient status, disease, or health problems.

Research has shown that individuals who meet WIC income guidelines typically have diets that do not meet USDA dietary recommendations. For this reason, Risk 401 can be assigned when a woman has no other risk factors.

Read the risk information sheets for each of these risks:

- ☐ 401– Presumed Dietary Eligibility for Women and Children (ages 2 to 5 years)
- ☐ 427 Inappropriate Nutrition Practices for Women
  - 427.1 Inappropriate Use of Dietary Supplements
  - 427.2 Eating Very Low Calorie or Nutrient Diet
  - 427.3 Pica - Women
  - 427.4 Inadequate Iron, Iodine or Folic Acid Supplementation

Learning activity

Using the risk information sheets as a reference, write your answer to the following question:

What information, if any, should be documented for the following risks?

Risk	Documentation
427.1 – Inappropriate Use of Dietary Supplements	
427.2 – Consuming a Very Low Calorie or Nutrient Diet	

Risk	Documentation
427.3 – Pica -Women	
427.4 – Inadequate Iron, Iodine or Folic Acid Supplementation	

1. Marta is a breastfeeding woman. She ran out of vitamins several weeks ago. Would she qualify for a dietary risk?

   ☐ YES – RISK # ☐ ☐ NO

2. Karen is a non-breastfeeding woman. She is trying to get her lose weight and says that chewing on large amounts of ice every day decreases her appetite. Would she qualify for a dietary risk?

   ☐ YES – RISK # ☐ NO

3. Kimberly is a woman in her 6th month of pregnancy. She has not taken a prenatal vitamin or any other supplement because they make her constipated. Would she qualify for a dietary risk?

   ☐ YES – RISK # ☐ ☐ NO

4. Adrienne is a pregnant woman. She usually follows a vegan diet but she has been eating eggs since she got pregnant. She also takes prenatal vitamins that the doctor gave her. Would she qualify for a dietary risk?

   ☐ YES – RISK # ☐ ☐ NO

5. Malini is a breastfeeding woman. She takes a double dose of herbal supplements daily to help her milk supply and to give her more energy. She gets them from the health food store and they told her they were safe when breastfeeding. Would she qualify for a dietary risk?

☐ YES – RISK # ☐ ☐ NO

6. Sierra is being certified as a pregnant woman. She has been diagnosed with gestational diabetes. Would she qualify for a presumed eligibility risk?

☐ YES – RISK # ☐ ☐ NO

3-6 Environmental risks for all women

Women with these risks are using substances that do not support good health.

Read the risk information sheets for each of the following risks:

- ☐ 371 Nicotine and Tobacco Use
- ☐ 372 Alcohol and Substance Use
- ☐ 902 – Women or Infant/Child of Primary Caregiver with Limited Ability to Make Feeding Decisions or Prepare Food

Learning activity

Using the risk information sheets as a reference, write your answers to the following questions:

1. Tran is a non-breastfeeding woman who usually drinks 3 beers every evening. Would she qualify for any of these nutrition risks?
   ☐ YES – RISK # ☐ ☐ NO

2. Annette is a pregnant woman who smokes one-half a pack of cigarettes a day. This is half of what she smoked before she was pregnant. Would she qualify for any of these nutrition risks?
   ☐ YES – RISK # ☐ ☐ NO

3. Wade is a 4-week-old baby. His mother, Wilma, is developmentally delayed. She lives with her family but tries to care for him herself. Would Wade qualify for any of these risks?
   ☐ YES – RISK # ☐ ☐ NO

3-7 Chapter Test

Complete the following test to demonstrate understanding of risks that apply to all women. Risk information sheets may be used for reference just as in a typical clinic setting.

After you have completed the test, talk it over with your training supervisor.

Use the information provided about each participant and the risks discussed in this chapter to complete the table following each example:

1. Brooke:
   - She is a pregnant woman who is expecting twins.
   - Her 3-year-old was born five weeks early and weighed 3 pounds 3 ounces at birth.
   - She smokes about five cigarettes a day and is trying to quit. Sometimes she eats the cigarette butts to help control her craving for tobacco.

What risks would be assigned?	Risk #s:
Additional documentation required?	Yes ☐ No ☐
Referral to the RD required?	Yes ☐ No ☐

2. Janet:
   - She is 16 years old and just delivered her first child 3 weeks ago.
   - She is not breastfeeding.
   - She tells you during her appointment that she was diagnosed with anorexia when she was 14 and hasn't been eating since she had the baby because she doesn't want to be fat anymore.

- She is not taking vitamins but has been taking amphetamines to help her lose weight.

What risks would be assigned?	Risk #s:
Additional documentation required?	Yes ☐ No ☐
Referral to the RD required?	Yes ☐ No ☐

3. May:
   - She is a pregnant woman taking prenatal vitamins.
   - The child born from her last pregnancy had anencephaly and died when he was just 5 days old.
   - She conceived this current pregnancy three months later.

What risks would be assigned?	Risk #s:
Additional documentation required?	Yes ☐ No ☐
Referral to the RD required?	Yes ☐ No ☐

4. Sydney:
   - She is 19 years old.
   - She has 3 children and is pregnant with her fourth.
   - Sydney's last baby weighed 9 pounds 3 ounces and she is concerned that this baby will be big also.
   - She had gestational diabetes during her last pregnancy.

What risks would be assigned?	Risk #s:
Additional documentation required?	Yes ☐ No ☐
Referral to the RD required?	Yes ☐ No ☐

4-1 Risks for Pregnant Women

Overview

After completing this chapter, you will be able to assess and assign nutrition risks for pregnant women. Additional risks that apply to pregnant women can be found in Chapters 2 and 3. The following table lists risks for pregnant women:

Risk Group:	Description:
Anthropometric	☐ 101– Underweight Women ☐ 111 – Overweight Women ☐ 131 – Low Prenatal Weight Gain ☐ 133 – High Maternal Weight Gain
Biochemical	---
Clinical/Medical	☐ 301 – Hyperemesis Gravidarum ☐ 302 – Gestational Diabetes ☐ 334 – Lack of or Inadequate Prenatal Care ☐ 336 – Fetal Growth Restriction ☐ 338 – Pregnant Woman Currently Breastfeeding
Dietary	☐ 427 – Inappropriate Nutrition Practices for Women ➢ 427.5 Eating Potentially Harmful Foods
Environmental	---

To complete these chapters, you must read each of the risk information sheets. If you are reading this on a computer, click on the title of each risk to open the link. If you are reading this as a printed version, locate the risk information sheets at the end of the printed module.

For more information on specific health and medical conditions, refer to *More Information about Medical Conditions* in the resource section.

Learning activity:

Write your answer to the following question:

1. All of the anthropometric risks for pregnant women listed in the table above are based on pre-pregnancy weight. Why might this be an important consideration for this category?

4-2 Anthropometric risks for pregnant women

These risks are related to the pre-pregnancy weight or prenatal weight gain of pregnant women. When reviewing Risks 101, 111 and 133, be sure to focus on the information specifically for pregnant women. Read the risk information sheet for each of the following risks:

- ☐ 101 – Underweight Women
- ☐ 111 – Overweight Women
- ☐ 131 – Low Prenatal Weight Gain
- ☐ 133 – High Maternal Weight Gain

Learning activity

Using the risk information sheets as a reference, match the risk with the condition:

101 – Underweight	Weight gain during the first month of pregnancy is 9 pounds.
111 – Overweight	Pre-pregnancy BMI is 24 and prenatal weight gain is 1 pound per month during the 2nd trimester.
131 – Low Prenatal Weight Gain	Weight loss of 2 pounds during the first trimester.
131 – Low Prenatal Weight Gain	Pre-pregnancy BMI is 18.
133 – High Maternal Weight Gain	Pre-pregnancy BMI is 29.

4-3 Clinical risks for pregnant women

These risks are all conditions that only exist during pregnancy. Read the risk information sheet for each of the following risks.

- ☐ 301 – Hyperemesis Gravidarum
- ☐ 302 – Gestational Diabetes
- ☐ 334 – Lack of or Inadequate Prenatal Care
- ☐ 336 – Fetal Growth Restriction
- ☐ 338 – Pregnant Woman Currently Breastfeeding

Learning activity

Using the risk information sheets as a reference, write your answers to the following questions:

1. Would a pregnant woman who says "I've had a lot of morning sickness, but by noon I'm feeling better" be describing hyperemesis gravidarum (Risk 301)?

2. What is the difference between diabetes mellitus (Risk 343) and gestational diabetes (Risk 302)?

3. Would someone who is 30 weeks pregnant and has had one prenatal visit during that time meet the criteria for inadequate prenatal care (Risk 334)?

4. A pregnant woman tells you that her doctor has diagnosed her with IUGR. How would this relate to fetal growth restriction (Risk 336)?

A woman is breastfeeding her toddler once a day and is pregnant. Would she meet the criteria for Risk 338?

4-4 Dietary risks for pregnant women

There is one dietary risk relates specifically to pregnant women and is considered an "Inappropriate Nutrition Practices for Women." This risk identifies a nutrition practice that may result in impaired nutrient status, disease, or health problems. Read the risk information sheet for this risk:

- ☐ 427 – Inappropriate Nutrition Practices for Women
  - ➢ 427.5 Eating Potentially Harmful Foods

Learning activity

Using the risk information sheet as a reference, write your answer to the following question:

1. Sierra is being certified as a pregnant woman. She takes a bologna sandwich to work for lunch every day. Would she qualify for a dietary risk?

   ☐ YES – RISK # ☐ ☐ NO

2. Rayanne is a pregnant woman. She loves eating sushi at least once a week especially when it is made with fresh salmon or raw ahi tuna. Would she qualify for a dietary risk?

   ☐ YES – RISK # ☐ ☐ NO

4-5 Chapter Test

Complete the following test to demonstrate understanding of risks that apply specifically to pregnant women. Risk information sheets may be used for reference just as in a typical clinic setting.

After you have completed the test, talk it over with your training supervisor.

Use the information provided about each participant and the risks discussed in this chapter to complete the table following each example:

1. Beth:
   - Her pre-pregnancy BMI was 29.
   - Her baby is due 2 months from today and she has gained 44 pounds.
   - She is breastfeeding her older child who is 22 months old.

What risks would be assigned?	Risk #s:	
Additional documentation required?	Yes	No
Referral to the RD required?	Yes	No

2. Mary:
   - Her pre-pregnancy BMI was 25.
   - She has lost 4 pounds since her pregnancy began.
   - At 14 weeks into this pregnancy, she saw a health care provider for the first time and she was diagnosed with severe hyperemesis gravidarum.

What risks would be assigned?	Risk #s:	
Additional documentation required?	Yes	No
Referral to the RD required?	Yes	No

3. Wendy:
   - Her prenatal weight gain grid shows that she has not gained the recommended amount of weight during this pregnancy.
   - She recently saw a new health care provider who diagnosed her with IUGR.

What risks would be assigned?	Risk #s:	
Additional documentation required?	Yes	No
Referral to the RD required?	Yes	No

4. Susanna:
   - Her pre-pregnancy BMI was 32.
   - She typically drinks raw, unpasteurized milk as she believes it is healthier for her.

What risks would be assigned?	**Risk #s:**	
Additional documentation required?	Yes	No
Referral to the RD required?	Yes	No

5-1 Risks for Infants and Children

Overview

After completing this chapter, you will be able to assess and assign nutrition risks for infants and children. Additional risks that apply to infants and children are found in Chapter 2. The following table lists the risk for infants and children:

Risk Group:	Description:
Anthropometric	☐ 103 – Underweight Infants and Children ☐ 113 – Overweight Children - 2 to 5 years ☐ 114 – At Risk for Overweight Children – 2 to 5 years ☐ 115 – High Weight for Length Under Age 2 Years ☐ 121 – Short Stature ☐ 134 – Failure to Thrive ☐ 135 – Infant Weight Loss Birth to 6 Months ☐ 141A/B – Low Birth Weight ☐ 151 – Small for Gestational Age ☐ 152 – Low Head Circumference ☐ 153 – Large for Gestational Age Infants
Biochemical	---
Clinical/Medical	☐ 142 – Preterm or Early Term Delivery ☐ 361 – Mental Illnesses (does not apply for infants) ☐ 382 – Fetal Alcohol Spectrum Disorders ☐ 383 – Neonatal Abstinence Syndrome

Dietary	➢ 401 – Presumed Dietary Eligibility for Women and Children 2 to 5 years ☐ 411– Inappropriate Nutrition Practices for Infants ➢ 411.1 – Use of Substitutes for Breastmilk or Formula ➢ 411.2 – Inappropriate Use of Bottles or Cups ➢ 411.3 – Early Introduction of Beverages or Solid Foods ➢ 411.4 – Inappropriate Feeding Practices ➢ 411.5 – Feeding Potentially Harmful Foods ➢ 411.6 – Incorrect Dilution of Formula ➢ 411.7 – Infrequent Breastfeeding ➢ 411.8 – Feeding a Very Low Calorie or Nutrient Diet ➢ 411.9 – Improper Handling of Expressed Breast Milk or Formula ➢ 411.10 – Inappropriate Use of Dietary Supplements ➢ 411.11 – Inadequate Fluoride or Vitamin D Supplementation ☐ 425 – Inappropriate Nutrition Practices for Children ➢ 425.1 – Inappropriate Beverages as Milk Source ➢ 425.2 – Feeding Sweetened Beverages ➢ 425.3 – Inappropriate Use of Bottles, Cups or Pacifiers ➢ 425.4 – Inappropriate Feeding Practices ➢ 425.5 – Feeding Potentially Harmful Foods ➢ 425.6 – Feeding a Very Low Calorie or Nutrient Diet ➢ 425.7 – Inappropriate Use of Dietary Supplements ➢ 425.8 – Inadequate Fluoride or Vitamin D Supplementation ➢ 425.9 – Pica - Children ☐ 428 – Presumed Dietary Eligibility for Infants and Children 4 to 23 months

Environmental	☐ 603 – Breastfeeding Complications or Potential Complications for Infants ☐ 701 – Infant Up to 6 months old of WIC Mom or WIC Eligible Mom ☐ 702 – Breastfeeding Infant of a Woman at Nutritional Risk ☐ 902 – Women or Infant/Child of Primary Caregiver with Limited Ability to Make Feeding Decisions or Prepare Food

To complete these chapters, you must read each of the risk information sheets. If you are reading this on a computer, click on the title of each risk to open the link. If you are reading this as a printed version, locate the risk information sheets at the end of the printed module.

For more information on specific health and medical conditions, refer to *More Information about Medical Conditions* in the resource section.

Learning activity:

Write your answer to the following question:

1. There many more dietary risks for infants and children than for women. Looking at the table above, why do you think that might be?

5-2 Anthropometric risks for infants and children

The risks listed below are all risks related to the growth of infants and children.

Read the risk information sheet for each of the following risks.

- ☐ 103 – Underweight Infants and Children
- ☐ 113 – Overweight Children -2 to 5 years
- ☐ 114 – At Risk for Overweight Children – 2 to 5 years
- ☐ 115 – High Weight for Length Under Age 2 Years
- ☐ 121 – Short Stature
- ☐ 134 – Failure to Thrive
- ☐ 135 – Infant Weight Loss Birth to 6 months
- ☐ 141A/B – Low Birth Weight
- ☐ 151 – Small for Gestational Age
- ☐ 152 – Low Head Circumference
- ☐ 153 – Large for Gestational Age Infants

Learning activity

Using the risk information sheets as a reference, write your answers to the following questions:

1. Which of these risks is manually selected by the certifier rather than assigned by the data system?

2. Which of these risks require a high-risk referral to the WIC nutritionist?

3. Describe the difference between small for gestational age and low birth weight.

4. Timothy was born August 1 and weighed 8 pounds 14 ounces. Today is August 16 and he weighs 8 pounds 2 ounces. Would he qualify for any of these risks?

   ☐ YES – RISK # ☐ ☐ NO

5. Terence is a 3-year-old boy. His BMI is at the 10th percentile. Would he qualify for any of these risks?

   ☐ YES – RISK No. ☐ ☐ NO

6. Tommy is 13 months old and weighed 4 pounds at birth. Tommy's mom brings a note from the doctor that says, "Referred to WIC for FTT." Would he qualify for any of these risks?

   ☐ YES – RISK No. ☐ ☐ NO

7. Todd weighed 9 pounds at birth. Would he qualify for any of these risks?

   ☐ YES – RISK # ☐ ☐ NO

8. Thad is 4 years old and has come to WIC for recertification. At his last appointment, his BMI was at the 90th percentile. At this certification, his BMI is at the 98th percentile. Would he qualify for any of these risks?

   ☐ YES – RISK # ☐ ☐ NO

9. Tyrone is 10 months old. His length is at the 5th percentile. Would he qualify for any of these risks?

   ☐ YES – RISK # ☐ ☐ NO

10. Taylor is 13 months old and her weight for length is at the 10th percentile. Would she qualify for any of these risks?

    ☐ YES – RISK # ☐ ☐ NO

11. Tanner is 20 months old and his weight for length is at the 98th percentile. Would he qualify for any of these risks?

    ☐ YES – RISK # ☐ ☐ NO

5-3 Clinical risks for infants and children

These risks are related to infants and children who were born early or have health problems that apply only to infants and children.

Read the risk information sheets for each of the following risks.

- ☐ 142 – Preterm or Early Term Delivery
- ☐ 361 – Mental Illnesses (does not apply for infants)
- ☐ 382 – Fetal Alcohol Spectrum Disorders
- ☐ 383 – Neonatal Abstinence Syndrome

Learning activity

Using the risk information sheets as a reference, write your answers to the following questions:

1. Which of these risks require a high-risk referral to the WIC nutritionist?

2. What is the key information you need to know if a mother reports that her child has fetal alcohol syndrome or NAS?

3. William is a one-month old baby who was born at 37 weeks gestation. His mother reports that he is healthy and growing well. Would William qualify for a nutrition risk?

   ☐ YES – RISK # ☐ ☐ NO RISK

5-4 Dietary risks for infants

There are 11 risks for infants that are considered "Inappropriate Nutrition Practices for Infants". Each identifies a feeding practice that may result in impaired nutrient status, disease or health problems.

Research has shown that individuals who meet WIC income guidelines typically have diets that do not meet USDA dietary recommendations. For this reason, WIC has Risk 428 that can be assigned to an infant that has no other nutrition risk factors.

Read the risk information sheet for the each of the following dietary risks for infants:

- ☐ 411 Inappropriate Nutrition Practices for Infants
  - 411.1 – Use of Substitutes for Breast Milk or Formula
  - 411.2 – Inappropriate Use of Bottles or Cups
  - 411.3 – Early Introduction of Beverages or Solid Foods
  - 411.4 – Inappropriate Feeding Practices
  - 411.5 – Feeding Potentially Harmful Foods
  - 411.6 – Incorrect Dilution of Formula
  - 411.7 – Infrequent Breastfeeding
  - 411.8 – Feeding Very Low Calorie or Nutrient Diet
  - 411.9 – Improper Handling of Expressed Breast Milk or Formula
  - 411.10 – Inappropriate Use of Dietary Supplements
  - 411.11 – Inadequate Fluoride or Vitamin D Supplementation
- ☐ 428 –Presumed Dietary Eligibility for Infants and Children (4 to 23 months)

Learning activity

Using the risk information sheets as a reference, write your answers to the following questions:

1. Which of these risks is only appropriate for exclusively breastfed infants?

2. What information, if any, should be documented if you assign the following risks?

Risk	Documentation
411.1 – Use of Substitutes for Breast Milk or Formula	
411.2 – Inappropriate Use of Bottles or Cups	
411.3 – Early Introduction of Beverages or Solid Foods	
411.4 – Inappropriate Feeding Practices	
411.5 – Feeding Potentially Harmful Foods	
411.6 – Incorrect Dilution of Formula	
411.7 – Infrequent Breastfeeding	
411.8 – Feeding a Very Low Calorie or Nutrient Diet	
411.9 – Improper Handling of Expressed Breast Milk or Formula	
411.10 – Inappropriate Use of Dietary Supplements	
411.11 – Inadequate Fluoride or Vitamin D Supplementation	

3. Eric is 11 months old. Eric's mom works full time so she pumps and freezes breast milk for Eric to have while she is working. Eric's grandmother often thaws the frozen breastmilk in the microwave then refreezes any breastmilk that is left after a feeding. Would he qualify for a dietary risk?

☐ YES – RISK # ☐ ☐ NO

4. Sonya is 4 months old. Sonya's mom runs out of money at the end of the month to buy formula so she mixes it with extra water and some cereal to make it go further. Would Sonya qualify for a dietary risk?

   ☐ YES – RISK # ☐ ☐ NO

5. Davy is 8 months old. He is able to sit upright and turn his head. Davy enjoys eating dry pieces of cereal on his own. Would he qualify for a dietary risk?

   ☐ YES – RISK # ☐ ☐ NO

6. Scott is 3 months old and is very happy when he is drinking from his bottle. Scott's foster mom wants him to be happy but doesn't have enough time to hold the bottle for him all day so she has found a way to prop the bottle for Scott. Would he qualify for a dietary risk?

   ☐ YES – RISK # ☐ ☐ NO

7. Kate is 3½ months old. She is exclusively breastfed and her mom offers her a 2-ounce bottle of water daily to make sure she's properly hydrated. Would she qualify for a dietary risk?

   ☐ YES – RISK # ☐ ☐ NO

8. Jimmy is an exclusively breastfeeding 4-month-old boy. His mom is very well organized and feeds him every 6 hours on the hour. Would he qualify for a dietary risk?

   ☐ YES – RISK # ☐ ☐ NO

9. Peter is a 7-month-old formula fed infant. His father explains that he lost the manufacturer's scoop to prepare his formula, but that the one that came with his coffee is just about the same size. Would he qualify for a dietary risk?

   ☐ YES – RISK # ☐ ☐ NO

10. Tai is 9 months old. Since both of her parents are vegan, they prefer to feed Tai rice milk. Would she qualify for a dietary risk?

☐ YES – RISK # ☐ ☐ NO

11. Hakim is 4 months old. He lives in a community that does not have fluoridated water. Would he qualify for a dietary risk?

☐ YES – RISK # ☐ ☐ NO

12. Sakura is 11 months old. Sakura's parents are so proud that their daughter already seems to love eating sushi, especially raw tuna. Would she qualify for a dietary risk?

☐ YES – RISK # ☐ ☐ NO

13. Ian is a 5-month-old, exclusively breastfed infant. He typically nurses six or seven times a day. Would he qualify for a dietary risk?

☐ YES – RISK # ☐ ☐ NO

14. Gina is 1 month old. Gina's mom tells you that she has been giving Gina extra calcium supplements because she wants to be sure that Gina's bones are strong. Would she qualify for a dietary risk?

☐ YES – RISK # ☐ ☐ NO

15. Callyn is 8 months old and usually drinks 24 ounces of formula per day mixed with fluoridated water. She is eating a variety of baby foods and does not take any vitamin drops. Would she qualify for a dietary risk?

☐ YES – RISK # ☐ ☐ NO

5-5 Dietary risks for children

There are 9 risks for children that are considered "*Inappropriate Nutrition Practices for Children.*" Each identifies a feeding practice that may result in impaired nutrient status, disease, or health problems.

Research has shown that individuals who meet WIC income guidelines typically have diets that do not meet USDA dietary recommendations. For this reason, WIC has Risk 401 and 428 that can be assigned to a child based on their age when no other risk factors have been identified.

Read the risk information sheets for the each of the following dietary risks for children:

- ☐ 401– Presumed Dietary Eligibility for Women and Children (ages 2 to 5 years)
- ☐ 425 Inappropriate Nutrition Practices for Children
  - 425.1 – Inappropriate Beverages as Milk Source
  - 425.2 – Feeding Sweetened Beverages
  - 425.3 – Inappropriate Use of Bottles, Cups or Pacifiers
  - 425.4 – Inappropriate Feeding Practices
  - 425.5 – Feeding Potentially Harmful Foods
  - 425.6 – Feeding a Very Low Calorie or Nutrient Diet
  - 425.7 – Inappropriate Use of Dietary Supplements
  - 425.8 – Inadequate Fluoride or Vitamin D Supplementation
  - 425.9 – Pica - Children
- ☐ 428 –Presumed Dietary Eligibility for Infants and Children (ages 4 to 23 months)

Learning activity

Using the risk information sheets as a reference, write your answers to the following questions:

What information, if any, should be documented if you assign the following risks?

Risk	Documentation
425.1 – Inappropriate Beverages as Milk Source	
425.2 – Feeding Sweetened Beverages	
425.3 – Inappropriate Use of Bottles, Cups or Pacifiers	
425.4 – Inappropriate Feeding Practices	
425.5 – Feeding Potentially Harmful Foods	
425.6 – Feeding Very Low Calorie or Nutrient Diet	
425.7 – Inappropriate Use of Dietary Supplements	
425.8 – Inadequate Fluoride or Vitamin D Supplementation	
425.9 – Pica	

1. Timothy is 3 years old. He likes to drink a big glass of apple juice with his meals every day. Would he qualify for a dietary risk?

   ☐ YES – RISK # ☐ ☐ NO

2. Tara is 20 months old. Her parents are both vegetarians but offer Tara fish and poultry on a regular basis. She also frequently likes to drink unpasteurized milk with her parents. Would she qualify for a dietary risk?

   ☐ YES – RISK # ☐ ☐ NO

3. Faye is 2 ½ years old. Since Faye doesn't like the taste of regular milk, her grandmother gives her almond milk mixed with some non-dairy creamer instead. Would she qualify for a dietary risk?

☐ YES – RISK # ☐ ☐ NO

4. Terence is 4 ½ years old, active and very slender. He has been a vegetarian his whole life and enjoys eating eggs, low fat dairy products and lots of fresh fruits and vegetables. Would he qualify for a dietary risk?

☐ YES – RISK # ☐ ☐ NO

5. Annalee is 15 months old. At naptime, she likes to be put to bed with a bottle of warm milk. Would she qualify for a dietary risk?

☐ YES – RISK # ☐ ☐ NO

6. José is 4 years old. José drinks a quart of milk every day and several glasses of water. He does not take vitamins or any fluoride supplements because he lives in a city with fluoridated water. Would he qualify for a dietary risk?

☐ YES – RISK # ☐ ☐ NO

7. Nai is a 3-year-old boy. Nai's mother is a smoker and he enjoys eating her cigarette butts. Would he qualify for a dietary risk?

☐ YES – RISK # ☐ ☐ NO

8. Emily is a 3 ½-year-old girl with a major sweet tooth. Instead of giving her daughter candy all the time, Emily's mom allows her to eat as many of her orange flavored chewable multivitamins as she wants. Would she qualify for a dietary risk?

☐ YES – RISK # ☐ ☐ NO

9. Maria is a 2 ½-year-old girl who likes sweets and often throws tantrums when she doesn't get her way. Maria's dad gives her a pacifier dipped in honey to suck on and keep her happy. Would she qualify for a dietary risk?

☐ YES – RISK # ☐ ☐ NO

10. Michael is 23 months old. Even though it is a slow process, he likes to drink his milk out of a regular cup on his own. Would he qualify for dietary risk?

☐ YES – RISK # ☐ ☐ NO

11. Brianne is 3 years old and drinks 16 ounces of 2% milk from a cup every day. She does not take any vitamin supplements. Would she qualify for a dietary risk?

☐ YES – RISK # ☐ ☐ NO

12. Kevin is 4 years old. After a complete nutrition assessment, no other health or dietary risks were identified. Would he qualify for a presumed eligibility risk?

☐ YES – RISK # ☐ ☐ NO

5-6 Environmental risks for infants and children

These risks are related to the infants and children and their mothers.

Read the risk information sheet for each of the following risks:

- ☐ 603 – Breastfeeding Complications or Potential Complications for Infants
- ☐ 701 – Infant Up to 6 Months Old of WIC Mom or WIC Eligible Mom
- ☐ 702 – Breastfeeding Infant of Woman at Nutritional Risk
- ☐ 902 – Women or Infant/Child of Primary Caregiver with Limited Ability to Make Feeding Decisions or Prepare Food

Learning activity

Using the risk information sheets as a reference, write your answers to the following questions:

1. How will you know if an infant's mother had (or might have had) a nutrition risk during her pregnancy?

2. Alexis is a 4-day-old breastfeeding infant with jaundice. Her mother was on WIC during her pregnancy and is very anemic. Would Alexis qualify for any of these risks?

   ☐ YES – RISK # ☐ ☐ NO

3. Sawyer is a five-month-old infant. Sawyer's mother reports that she smokes marijuana daily to help her relax. Would Sawyer qualify for any of these risks?

☐ YES – RISK # ☐ ☐ NO

5-7 Chapter Test

Complete the following test to demonstrate understanding of risks that apply to infants and children. Risk information sheets may be used for reference just as in a typical clinic setting.

After you have completed the test, talk it over with your training supervisor.

Use the information provided about each participant and the risks discussed in this chapter to complete the table following each example:

1. Seth:
   - He is 5 months old and at the 3rd percentile weight for length.
   - He has been drinking whole milk as there is often not enough money for formula.
   - His father tells you he was diagnosed with NAS as his mother used drugs during pregnancy.

What risks would be assigned?	Risk #s:
Additional documentation required?	Yes No
Referral to the RD required?	Yes No

2. Wilson:
   - He is 2 weeks old and is exclusively breastfeeding on a strict schedule.
   - He weighed 10 pounds at birth.
   - His mom was on WIC during her pregnancy and is currently following a low carbohydrate high protein diet to try and lose weight.

What risks would be assigned?	Risk #s:
Additional documentation required?	Yes No
Referral to the RD required?	Yes No

3. Xavier:
   - He is 8 weeks old, born at 38 weeks gestation and weighed 5 pounds 12 ounces.
   - His mom tells you that the doctor said that he was small for his gestational age when he was born so she has been adding less water to his formula and propping the bottles on a regular basis to try and boost his intake.
   - His weight for length is now at the 95th percentile.

What risks would be assigned?	Risk #s:
Additional documentation required?	Yes No
Referral to the RD required?	Yes No

4. Zeus:
   - He is a 3-year-old child who recently immigrated to the US.
   - His height is below the 5th percentile for his age.
   - His BMI is at the 10th percentile.

What risks would be assigned?	Risk #s:
Additional documentation required?	Yes No
Referral to the RD required?	Yes No

5. Nick:
   - He is an exclusively breastfeeding infant who is 15 days old.
   - He weighed 8 pounds 3 ounces at birth and now weighs 8 pounds 1 ounce.
   - His mom was on WIC during her pregnancy and is still underweight. She tells you that he has trouble nursing, he doesn't latch on very well because she has flat nipples. He lost 8 ounces after he was born but has slowly been regaining the weight.

What risks would be assigned?	Risk #s:
Additional documentation required?	Yes No
Referral to the RD required?	Yes No

6. Zachary:
   - He just turned 2 years old.
   - His mother offers lots of squeeze packs to avoid messes during snack and meal times. She does not want to spend money on vitamin supplements
   - He drinks from a bottle at night and a cup during the day.
   - His BMI falls on the 98th percentile.

What risks would be assigned?	Risk #s:
Additional documentation required?	Yes No
Referral to the RD required?	Yes No

6-1 Risks for Postpartum Women

Overview

After completing this chapter, you will be able to assess and assign nutrition risks that apply to postpartum women, both breastfeeding and non-breastfeeding. Additional risks that apply to postpartum women can be found in Chapters 2 and 3. The following table lists risks that have specific criteria for postpartum women:

Risk Group:	Description:
Anthropometric	☐ 101– Underweight Women ☐ 111 – Overweight Women ☐ 133 – High Maternal Weight Gain
Biochemical	---
Clinical/Medical	☐ 363 – Pre-Diabetes
Dietary	---
Environmental	---

To complete these chapters, you must read each of the risk information sheets. If you are reading this on a computer, click on the title of each risk to open the link. If you are reading this as a printed version, locate the risk information sheets at the end of the printed module.

For more information on specific health and medical conditions, refer to *More Information about Medical Conditions* in the resource section.

Learning activity:

Refer to the table above and write your answer to the following question:

1. There are three anthropometric risks for postpartum women. What aspect of a women's health are they related to?

6-2 Anthropometric risks for postpartum women

These risks are related to the pre-pregnancy/current weight or pregnancy weight gain of postpartum women, both breastfeeding and non-breastfeeding. When reviewing these risks, be sure to focus on the information specifically for postpartum women. Read the risk information sheet for each of the following risks:

- ☐ 101 – Underweight Women
- ☐ 111 – Overweight Women
- ☐ 133 – High Maternal Weight Gain

Learning activity

Using the risk information sheets as a reference, write your answers to the following questions:

1. Sally's pre-pregnancy BMI was 29 and she gained 30 pounds during her pregnancy. She is a non-breastfeeding woman whose baby is 2 months old. Would she qualify for a nutrition risk?
   ☐ YES – RISK # ☐ ☐ NO

2. Sue is a breastfeeding woman of a 2 weeks old. Her BMI before pregnancy was 20.and her weight gain during pregnancy was 32 pounds. Would she qualify for a nutrition risk?
   ☐ YES – RISK # ☐ ☐ NO

6-3 Clinical risk for postpartum women

This risk is associated with postpartum women only. Read the risk information sheet for the following risk:

- ☐ 363 – Pre-Diabetes

Learning activity

Using the risk information sheet as a reference, write your answers to the following questions:

1. Clara is a non-breastfeeding woman who has been diagnosed with pre-diabetes. Would she qualify for a nutrition risk?

   ☐ YES – RISK # ☐ ☐ NO

2. Rose is being enrolled as a breastfeeding woman. She reports that her family has a history of diabetes and she is concerned that she might have a tendency toward high blood sugars. Would she meet the criteria for pre-diabetes?

   ☐ YES – RISK # ☐ ☐ NO

6-4 Chapter Test

Complete the following test to demonstrate understanding of risks that apply to postpartum women. Risk information sheets may be used for reference just as in a typical clinic setting.

After you have completed the test, talk it over with your training supervisor.

Use the information provided about each participant and the risks discussed in this chapter to complete the table following each example:

1. Tori:
   - She is a breastfeeding woman of a 7-month-old infant.
   - Her pre-pregnancy BMI was 24 and her current BMI is 28.
   - She gained 40 pounds during her pregnancy.

What risks would be assigned?	Risk #s:
Additional documentation required?	Yes No
Referral to the RD required?	Yes No

2. Tammy:
   - She is a non-breastfeeding woman with a 5-week-old infant.
   - Her pre-pregnancy BMI was 18 and her current BMI is 22.
   - Her doctor has diagnosed her with pre-diabetes.

What risks would be assigned?	Risk #s:
Additional documentation required?	Yes No
Referral to the RD required?	Yes No

7 Risks List

Overview

Risk No.	Risk Name
100s	**Anthropometric**
101	Underweight Women
103	Underweight Infants and Children
111	Overweight Women
113	Overweight Children - 2 to 5 years
114	At Risk for Overweight Children - 2 to 5 years
115	High Weight for Length Under 2 Years of Age
121	Short Stature
131	Low Prenatal Weight Gain
133	High Maternal Weight Gain
134	Failure to Thrive
135	Infant Weight Loss Birth to 6 months
141A	Low Birth Weight Birth to 11 months
141B	Low Birth Weight 12 to 23 months
142	Preterm or Early Term Delivery
151	Small for Gestational Age
153	Large for Gestational Age Infants
200s	**Biochemical**
201A	Low Hemoglobin or Hematocrit
201B	Very Low Hemoglobin or Hematocrit
211	Elevated Blood Lead Levels
300s	**Clinical**
301	Hyperemesis Gravidarum
302	Gestational Diabetes
303	History of Gestational Diabetes

Risk No.	Risk Name
304	History of Preeclampsia
311	History of Preterm or Early Term Delivery
312	History of Low Birth Weight
321	History of Fetal or Neonatal Loss
331	Pregnancy at a Young Age
332	Closely Spaced Pregnancy
333	High Parity and Young Age
334	Lack of or Inadequate Prenatal Care
335	Multiple Fetus Pregnancy
336	Fetal Growth Restriction
337	History of Birth of a Large for Gestational Age Infant
338	Pregnant Woman Currently Breastfeeding
339	History of a Birth with a Congenital Birth Defect
341	Nutrient Deficiency or Disease
342	Gastrointestinal Disorders
343	Diabetes Mellitus
344	Thyroid Disorders
345	Hypertension and Prehypertension
346	Renal Disease
347	Cancer
348	Central Nervous System Disorders
349	Genetic and Congenital Disorders
351	Inborn Errors of Metabolism
352A	Infectious Diseases - Acute
352B	Infectious Diseases - Chronic
353	Food Allergies
354	Celiac Disease
355	Lactose Intolerance
356	Hypoglycemia

Risk No.	Risk Name
357	Drug Nutrient Interactions
358	Eating Disorders
359	Recent Major Surgery, Physical Trauma or Burns
360	Other Medical Conditions
361	Depression
362	Developmental, Sensory or Motor Delays Interfering with Eating
363	Pre-Diabetes
371	Maternal Smoking
372	Alcohol and Substance Use
381	Oral Health Conditions
382	Fetal Alcohol Syndrome
383	Neonatal Abstinence Syndrome
400s	**Dietary**
401	Presumed Dietary Eligibility for Women and Children 2 to 5 years
411.1	Use of Substitutes for Breastmilk or Formula
411.2	Inappropriate Use of Bottles or Cups
411.3	Early Introduction of Beverages or Solid Foods
411.4	Inappropriate Feeding Practices
411.5	Feeding Potentially Harmful Foods
411.6	Incorrect Dilution of Formula
411.7	Infrequent Breastfeeding
411.8	Feeding a Very Low Calorie or Nutrient Diet
411.9	Improper Handling of Expressed Breastmilk or Formula
411.10	Inappropriate Use of Dietary Supplements
411.11	Inadequate Fluoride or Vitamin D Supplementation
425.1	Inappropriate Beverages as Milk Source
425.2	Feeding Sweetened Beverages
425.3	Inappropriate Use of Bottles, Cups or Pacifiers
425.4	Inappropriate Feeding Practices

Risk No.	Risk Name
425.5	Feeding Potentially Harmful Foods
425.6	Feeding a Very Low Calorie or Nutrient Diet
425.7	Inappropriate Use of Dietary Supplements
425.8	Inadequate Fluoride or Vitamin D Supplementation
425.9	Pica - Children
427.1	Inappropriate Use of Dietary Supplements
427.2	Eating a Very Low Calorie or Nutrient Diet
427.3	Pica - Women
427.4	Inadequate Iron, Iodine or Folic Acid Supplementation
427.5	Eating Potentially Harmful Foods
428	Presumed Dietary Eligibility for Infants and Children 4 to 23 months
500 to 900s	**Environmental**
502	Transfer of Certification
601	Breastfeeding Mother of Infant at Nutritional Risk
602	Breastfeeding Complications or Potential Complications for Women
603	Breastfeeding Complications or Potential Complications for Infants
701	Infant Up to 6 months of WIC Mom or WIC-Eligible Mom
702	Breastfeeding Infant of Woman at Nutritional Risk
801	Homelessness
802	Migrancy
901	Recipient of Abuse
902	Woman or Infant/Child of Primary Caregiver with Limited Ability to Make Feeding Decisions or Prepare Food
903	Foster Care
904	Environmental Tobacco Smoke Exposure

Risk 101 – Underweight Women

Risk description

A pregnant woman with a pre-pregnancy Body Mass Index (BMI) of less than 18.5. A postpartum woman (breastfeeding or non-breastfeeding) with a current or pre-pregnancy BMI of less than 18.5.

Reason for risk

Women who are underweight before pregnancy have a greater chance of delivering low birth weight or preterm babies and are at higher risk for pregnancy complications. Underweight postpartum women may have poor nutrient stores, inadequate food consumption or underlying medical conditions that can benefit from additional nutrition provided by WIC.

Category	Women
Risk level	Medium
At risk if:	Pregnant women: • Pre-pregnancy BMI less than 18.5 OR Breastfeeding or non-breastfeeding women less than 6 months postpartum: • Current BMI less than 18.5 OR • Pre-pregnancy BMI less than 18.5 OR Breastfeeding women over 6 months postpartum: • Current BMI less than 18.5

Not at risk if:	Current or Pre-pregnancy BMI greater than or equal to 18.5
How is risk assigned?	Data system assigned based on BMI calculations from height and pre-pregnancy or current weight measurements entered into the data system.
Additional documentation	No special requirements.

Risk 103 – Underweight Infants and Children

Risk description

Under 24 months of age:
less than or equal to the 5th percentile weight for length

2 to 5 years of age:
less than or equal to the 10th percentile BMI for age

Reason for risk

Children can be underweight for many reasons including medical conditions and inadequate food intake. Providing supplemental foods to underweight children can improve their health and growth by encouraging healthy food choices, healthy feeding relationships and nutrient dense foods.

Category	Infants, Children
Risk level	High
At risk if:	Under 24 months of age weighing less than or equal to the 5th percentile weight for length OR 2 to 5 years of age weighing less than or equal to the 10th percentile BMI for age
Not at risk if:	Under 24 months of age weighing more than the 5th percentile weight for length OR 2 to 5 years of age weighing more than the 10th percentile BMI for age
How is risk assigned?	Data system assigned based on BMI and weight for length percentiles from measurements entered into the data system.

Additional documentation	Referral to the RD is required.

Risk 111 - Overweight Women

Risk description

A pregnant woman with a pre-pregnancy Body Mass Index (BMI) greater than or equal to 25. A postpartum woman (breastfeeding or non-breastfeeding) with a Body Mass Index (BMI) greater than or equal to 25.

Reason for risk

Women who are overweight during pregnancy have an increased risk of pregnancy complications including gestational diabetes, hypertension, cesarean delivery and delivery of large babies. Postpartum women who are overweight are at greater risk for health problems such as diabetes, heart disease, hypertension and complications in future pregnancies.

Category	Women
Risk level	Medium
At risk if:	Pre-pregnancy BMI greater than or equal to 25 OR Breastfeeding or non-breastfeeding woman less than 6 months postpartum with a pre-pregnancy BMI greater than or equal to 25 OR Breastfeeding woman 6 months postpartum or more with a current BMI greater than or equal to 25
Not at risk if:	Pre-pregnancy BMI less than 25 OR Current BMI less than 25

How is risk assigned?	Data system assigned based on BMI calculations from height and pre-pregnancy weight or current weight measurements entered into the data system.
Additional documentation	No special requirements.

Risk 113 – Overweight Children 2 to 5 years

Risk description

Children 2 to 5 years of age with a current weight greater than or equal to the 95th percentile Body Mass Index (BMI). Recumbent length measurements may not be used to determine this risk.

Reason for risk

Children who are over the 95th percentile BMI are more likely to be overweight as adolescents or adults. Overweight adolescents and adults are at greater risk for chronic health problems such as hypertension and diabetes. Food restriction is not recommended for children at this age. Healthy food choices, healthy feeding relationships and physical activity can positively impact future weight.

Category	Children 2 to 5 years
Risk level	Medium
At risk if:	Greater than or equal to the 95th percentile BMI
Not at risk if:	Less than the 95th percentile BMI or if a recumbent length measurement was taken
How is risk assigned?	Data system assigned based on BMI percentiles from measurements entered into the data system.
Additional documentation	No additional documentation is needed.

Risk 114 – At Risk for Overweight Children 2 to 5 years

Risk Description

Children 2 to 5 years of age with a current weight that is between the 85th and less than the 95th percentile Body Mass Index (BMI). Recumbent length measurements may not be used to determine this risk.

Reason for Risk

Children who are between the 85th and 95th percentile BMI are at risk of becoming overweight as adolescents or adults. Overweight adolescents and adults are at greater risk for chronic health problems such as hypertension and diabetes. Food restriction is not recommended for this age group. Healthy food choices, healthy feeding relationships and physical activity can positively impact future weight.

Category	Children 2 to 5 years
Risk level	Medium
At risk if:	Greater than or equal to the 85th and less than the 95th percentile BMI
Not at risk if:	Less than the 85th percentile BMI OR Greater than or equal to the 95th BMI (see Risk 113 – Overweight Children) OR Measured recumbently
How is risk assigned?	Data system assigned based on BMI percentiles from measurements entered into the data system.
Additional documentation	No special requirements.

Risk 115 - High Weight for Length Under Age 2 Years

Risk description

Infants and children under 24 months of age with a weight for length at or above the 98th percentile.

Reason for risk

Young children whose weight for length is above the 98th percentile are likely to become overweight adolescents and adults. Overweight adolescents and adults are at greater risk of chronic health problems like diabetes and high blood pressure. Food restriction is not recommended for this age group. Healthy food choices, healthy feeding relationships and physical activity can positively impact future weight.

Category	Infants, Children under age 2 years
Risk level	Medium
At risk if:	Greater than or equal to the 98th percentile weight for length
Not at risk if:	Less than the 98th percentile weight for length
How is risk assigned?	Data system assigned based on weight for length percentiles calculated from measurements entered into the data system.
Additional documentation	None required.

Risk 121 - Short Stature

Risk description

Under 24 months of age with a length for age of less than or equal to the 5th percentile.

2 to 5 years of age with a height for age of less than or equal to the 10th percentile.

Use adjusted age for preterm children under 24 months of age.

Reason for risk

Stature can be impacted by inadequate intake, inherited tendencies and medical conditions. Encourage use of healthy foods to achieve maximum potential for growth.

Category	Infants, Children
Risk level	Low
At risk if:	Birth to 24 months: • Less than or equal to the 5th percentile length for age OR 2 to 5 years: • Less than or equal to the 10th percentile height for age
Not at risk if:	Birth to 24 months: • Greater than the 5th percentile length for age OR 2 to 5 years: • Greater than the 10th percentile height for age

How is risk assigned?	Data system selected based on height/length measurements entered into the data system.
Additional documentation	Document gestational age for preterm children. Data system will use adjusted age for risk assignment.

Risk 131 - Low Prenatal Weight Gain

Risk description

A pregnant woman with a low weight gain or weight loss during pregnancy.

Reason for risk

Low weight gain or weight loss during pregnancy can affect the growth and health of the fetus and is associated with an increased risk of preterm delivery and small for gestational age infants.

Category	Pregnant Women
Risk level	Medium
For a pregnancy with one baby, **At risk if:**	Pregnancy weight gain in the second and third trimesters based on pre-pregnancy weight:
	Underweight (BMI less than 18.5) with less than 1 pound per week weight gain OR Plots below the bottom line on the appropriate weight gain range of 28 to 40 pounds
	Standard weight (BMI 18.5 to 24.9) with less than 3/4 pound per week weight gain OR Plots below the bottom line on the appropriate weight gain range of 25 to 35 pounds
	Overweight (BMI 25.0 to 29.9) with less than 1/2 pound per week weight gain OR Plots below the bottom line on the appropriate weight gain range of 15 or 25 pounds

	Obese (BMI over or equal to 30.0) with less than 6 ounces per week weight gain OR Plots below the bottom line on the appropriate weight gain range of 11 to 20 pounds
For a pregnancy with twins, triplets or more	Additional research is needed to establish specific weight gain ranges for multifetal pregnancies.
Not at risk if:	Weight gain is above the levels described above
How is risk assigned?	Data system assigned based on prenatal weight gain and the due date entered into the data system.
Additional documentation	No additional documentation is needed.

Risk 133 - High Maternal Weight Gain

Risk description

A pregnant woman who gains weight above recommended levels or a postpartum woman (breastfeeding or non-breastfeeding) who had a total weight gain exceeding the guidelines for her Body Mass Index (BMI) during her most recent pregnancy. This risk does not apply to multifetal pregnancies.

Reason for risk

Pregnant women with high prenatal weight gain are at increased risk of caesarean deliveries and delivering large for gestational age infants. High prenatal weight gain is strongly associated with postpartum weight retention and subsequent maternal obesity.

Category	Women
Risk level	Medium
For a pregnancy with one baby, At risk if:	Underweight Pre-pregnancy (BMI less than 18.5): • pregnancy weight gain in the second and third trimesters is more than 1.3 pounds per week OR • pregnancy weight gain plots above the top line of the appropriate weight gain range OR • total pregnancy weight gain for the most recent pregnancy was more than 40 pounds

	Standard Weight Pre-pregnancy (BMI 18.5 to 24.9): • pregnancy weight gain in the second and third trimesters is more than 1 pound per week OR • pregnancy weight gain plots above the top line of the appropriate weight gain range OR • total pregnancy weight gain for the most recent pregnancy was more than 35 pounds
	Overweight Pre-pregnancy (BMI 25.0 to 29.9): • pregnancy weight gain in the second and third trimesters is more than .7 pounds per week OR • pregnancy weight gain plots above the top line of the appropriate weight gain range OR • total pregnancy weight gain for the most recent pregnancy was more than 25 pounds

	Obese Pre-pregnancy (BMI greater than or equal to 30): • pregnancy weight gain in the second and third trimesters is more than .6 pounds per week OR • pregnancy weight gain plots above the top line of the appropriate weight gain range OR • total pregnancy weight gain for the most recent pregnancy was more than 20 pounds
For a pregnancy with more than one baby	Additional research is needed to establish specific weight gain ranges for multifetal pregnancies
Not at risk if:	Pregnancy weight gain is less than the ranges described above OR Pregnant with more than one babies OR Total pregnancy weight gain for the most recent pregnancy was below ranges listed above OR Most recent pregnancy delivered more than one baby

How is risk assigned?	Data system assigned based on due date, pre-pregnancy weight, and current weight or total amount of prenatal weight gain entered into the data system.
Additional documentation	No special documentation required.

Risk 134 - Failure to Thrive

Risk description

Failure to thrive has been diagnosed for an infant or child by a health care provider. This diagnosis can be self reported.

Failure to thrive is a serious growth problem and is diagnosed when the infant or child's growth is significantly slower than expected.

If the infant/child was premature and is less than 24 months of age, use the adjusted gestational age to assess growth.

Reason for risk

Failure to thrive is a complex condition with many possible causes including acute or chronic illness, restricted diet, poor appetite or lack of food. Adequate nutrition is needed to support weight gain.

Category	Infants, Children
Risk level	High
At risk if:	Health care provider diagnosed failure to thrive
Not at risk if:	Failure to thrive has not been diagnosed by a health care provider
How is risk assigned?	Certifier selected from risk list in the data system.
Additional documentation	No special requirements.

Risk 135 - Infant Weight Loss Birth to 6 months

Risk description

An infant with significant weight loss within six months of birth.

Reason for risk

Infant weight loss is a serious concern and can indicate critical health and/or feeding problems.

Category	Infants birth to 6 months of age
Risk level	High
At risk if:	Infants from birth to 2 weeks of age: • Weight loss of greater than or equal to 7% of birthweight Infants from 2 weeks to 6 months of age: • Any weight loss based on two weight measurements taken at least 8 weeks apart
Not at risk if:	Infant has not lost weight OR Weight loss is less than 7% of birthweight.
How is risk assigned?	Data system assigned based on weight measurements entered into the data system.
Additional documentation	A referral to the RD is required.

Risk 141A/B - Low Birth Weight

Risk description

Risk 141A: An infant under 12 months of age whose birth weight was less than or equal to 5 pounds 8 ounces (2500 grams).

Risk 141B: An infant or child 12-24 months of age whose birth weight was less than or equal to 5 pounds 8 ounces (2500 grams).

Reason for risk

Infants with a low birth weight are at risk for numerous health concerns including deficiencies in physical and mental development during childhood. A high-quality diet is needed to complete their growth.

Category	141A: Infants 0-12 months 141B: Infants 12 months, Children 13-24 months
Risk level	141A: High 141B: Medium
At risk if:	Birth weight is less than or equal to 5 pounds 8 ounces (2500 grams)
Not at risk if:	Birth weight is greater than or equal to 5 pounds 9 ounces (2501 grams) OR Child is over 24 months of age
How is risk assigned?	Data system assigned based on birth weight entered into the data system.
Additional documentation	Risk 141A: Referral to the RD is required.

Risk 142 – Preterm or Early Term Delivery

Risk description

Infants and children under 24 months of age who were born before 39 weeks gestation.

Reason for risk

Preterm birth is defined as delivery at less than 37 weeks gestation. Early term birth is defined as delivery during the 37th or 38th week of gestation. Preterm birth is a leading cause of infant mortality. Babies born too early often have numerous health problems including physical conditions that interfere with intake and digestion that impacts ability to meet their high nutritional needs for increased growth.

Cateory	Infants, Children under 24 months
Risk level	Medium
At risk if:	Infant or child was born before 39 weeks gestation and is under 24 months of age
Not at risk if:	Infant or child was born at or after 39 weeks gestation OR Child is 24 months of age or older
How is risk assigned?	Data system assigned based on the number of weeks gestation entered into the data system.
Additional documentation	Documenting weeks gestation in the data system generates age adjusted growth charts for reference.

Risk 151 - Small for Gestational Age

Risk description

Small for gestational age is diagnosed by a health care provider for an infant or child under age 24 months. This diagnosis can be self reported.

Small for gestational age occurs when an infant does not grow to the expected size during pregnancy. Many of these babies are small even though born at full term.

Reason for risk

Infants who are born small for gestational age may have physical or developmental problems which interfere with nutritional status or food intake.

Category	Infants, Children under 24 months
Risk level	Low
At risk if:	Health care provider has diagnosed small for gestational age for an infant or child that is under 24 months of age
Not at risk if:	Health care provider has not been diagnosed small for gestational age for an infant or child OR Child is over 24 months of age
How is risk assigned?	Certifier selects risk from risk list in the data system.
Additional documentation	No special requirements.

Risk 152 - Low Head Circumference

Risk Description

Infant or child under 24 months of age with a head circumference at or below the 2nd percentile for age. Use adjusted age when preterm.

Reason for Risk

Low head circumference is associated with prematurity and very low birth weight as well as a variety of genetic, nutrition or health related factors that can impact cognitive function. Identification of low head circumference can lead to appropriate referrals and support.

Category	Infants, Children (Under 24 months)
Risk Level	Low
At risk if:	Infants or children under 24 months of age with head circumference for age at or below the 2nd percentile
Not at risk if:	Head circumference measurements for age are above the 2nd percentile OR Child is over 24 months of age
How is Risk Assigned?	Data system assigned based on head circumference measurements entered in the data system.
Additional Documentation	Enter gestational age in the data system when preterm. Data system will use adjusted age to assign risk.

Risk 153 - Large for Gestational Age Infants

Risk description

Infant with a birthweight of greater than or equal to 9 pounds (4000 grams) at birth or has been has been diagnosed as large for gestational age by a health care provider.

Reason for risk

Infants who are born large for gestational age may have physical or developmental problems which interfere with nutritional status or food intake.

Category	Infants
Risk level	Low
At risk if:	Infant's birthweight is greater than or equal to 9 pounds (4000 grams) OR Health care provider diagnosed large for gestational age
Not at risk if:	Infant's birthweight is less than 9 pounds OR Child is older than 12 months
How is risk assigned?	Data system assigned based on birth weight entered into the data system. Certifier selected if diagnosed by health care provider and infant weighs less than 9 pounds at birth.
Additional documentation	No special requirements.

Risk 201A/B - Low Hemoglobin or Hematocrit

Risk description

Hemoglobin (hgb) and Hematocrit (hct) tests screen for iron deficiency anemia (low blood iron). Smoking and living at higher altitudes changes the hgb/hct blood levels that make a participant at risk. See Policy 675 for a complete list of hgb/hct risk levels based on category, age, altitude and smoking.

Reason for risk

Iron deficiency is the most common cause of anemia in women and children. Anemia can impair energy metabolism and immune function. Iron is an important component of blood needed by women for healthy pregnancies and for recovery after childbirth and by children for normal growth and development.

Category	All
Risk level	201A, low hgb/hct: Medium 201B, very low hgb/hct: High
201A, at risk if:	**Infants Birth to 8 months** N/A, no hgb/hct testing
	Infants 9 to under 12 months Hgb: 10 to 10.9 Hct: 30% to 32.9%
	Children 12 to under 24 months Hgb: 10 to 10.9 Hct: 30% to 32.9%
	Children 2 to 5 years Hgb: 10.1 to 11.0 Hct: 30% to 32.9%

	Pregnant women (0 to 13 weeks) Hgb: 10 to 10.9 Hct: 30% to 32.9%
	Pregnant women (14 to 26 weeks) Hgb: 9.5 to 10.4 Hct: 29% to 31.9%
	Pregnant women (27 to 40 weeks) Hgb: 10 to 10.9 Hct: 30% to 32.9%
	Postpartum women Hgb: 11 to 11.9 Hct: 32.7% to 35.6%
Not at risk if:	Hemoglobin or hematocrit levels are above the ranges listed above.
How is risk assigned?	Data system assigned based on hemoglobin values entered into the data system. Data system automatically adjusts for altitude.
Additional documentation for 201A	None if 201A is assigned. Please see below for 201B documentation requirements.
201B, at risk if:	**Infants 9 to under 12 months** Hgb: 9.9 or lower Hct: 29.9% or lower
	Children 12 to under 24 months Hgb: 9.9 or lower Hct: 29.9% or lower
	Children 2 to 5 years Hgb: 10.0 or lower Hct: 29.9% or lower
	Pregnant women (0 to 13 weeks) Hgb: 9.9 or lower Hct: 29.9% or lower

	Pregnant women (14 to 26 weeks) Hgb: 9.4 or lower Hct: 28.9% or lower
	Pregnant women (27 to 40 weeks) Hgb: 9.9 or lower Hct: 29.9% or lower
	Postpartum women Hgb: 10.9 or lower Hct: 32.6% or lower
Additional documentation for 201B	Documentation of Hgb/Hct recheck (if taken in the clinic) is required. A referral to the RD is required when the hgb/hct is very low and risk 201B is assigned.

Risk 211 - Elevated Blood Lead Levels

Risk description

Blood lead level in the past 12 months that is equal to or higher than:

- **Children:** 3.5 µg/dL (micrograms per deciliter)
- **Pregnant, postpartum, infants:** 5 µg/dL

Reason for risk

High blood lead levels can affect health, learning and behavior as well as have severe and detrimental impact on a growing fetus. Adequate nutritional status can reduce the absorption of lead if exposure occurs.

Category	All
Risk level	High
At risk if:	Blood lead level in the past 12 months equal to or higher than 3.5 µg/dL for children or 5 µg/dL for pregnant, postpartum and infants
Not at risk if:	Blood level is below the participant's category threshold OR Blood level was taken more than 12 months ago
How is risk assigned?	Data system selected based on the blood lead levels entered into the data system.
Additional documentation	Referral to the RD is required.

Risk 301 - Hyperemesis Gravidarum

Risk description

Hyperemesis gravidarum has been diagnosed by a health care provider. This diagnosis can be self-reported.

Hyperemesis gravidarum is characterized by severe and persistent nausea and vomiting during pregnancy which may cause more than 5% weight loss and electrolyte imbalances. This risk is based on a chronic condition rather than single episodes.

Reason for risk

Occasional nausea and vomiting is common during pregnancy, however, severe ongoing episodes increases the risk of weight loss, dehydration and metabolic imbalances. Dehydration and acidosis can be harmful to the fetus.

Category	Pregnant Women
Risk level	High
At risk if:	Health care provider diagnosed hyperemesis gravidarum
Not at risk if:	Hyperemesis gravidarum has not been diagnosed by a health care provider OR Woman has single occasional episodes of nausea and vomiting
How is risk assigned?	Certifier selected from risk list in the data system.
Additional documentation	Referral to the RD is required.

Risk 302 - Gestational Diabetes

Risk description

A pregnant woman who has been diagnosed with gestational diabetes by a health care provider. Gestational diabetes is defined as any degree of glucose or carbohydrate intolerance that first appears during pregnancy. Gestational diabetes usually resolves following delivery. This diagnosis can be self reported.

Reason for risk

Women with gestational diabetes during pregnancy have a greater risk of birth complications and of developing diabetes mellitus after pregnancy. Babies born to women with diabetes are at greater risk of health complications.

Category	Pregnant Women
Risk level	High
At risk if:	Health care provider diagnosed gestational diabetes during this pregnancy
Not at risk if:	Woman has not been diagnosed by a health care provider OR Woman had diabetes before pregnancy began (see Risk 343 – Diabetes Mellitus)
How is risk assigned?	Certifier selected from risk list in the data system.
Additional documentation	Referral to the RD is required.

Risk 303 - History of Gestational Diabetes

Risk description

A woman who had gestational diabetes diagnosed by a health care provider during a past pregnancy. Gestational diabetes is a type of diabetes or glucose/carbohydrate intolerance that develops during pregnancy. This diagnosis can be self reported.

Reason for risk

Women with previous gestational diabetes are more likely to have gestational diabetes in the current pregnancy. Women with diabetes during pregnancy have a greater risk of birth complications and ongoing diabetes after pregnancy.

Category	Women
Risk level	Low
At risk if:	Health care provider diagnosed gestational diabetes during a previous pregnancy • Pregnant women: Any previous pregnancy • Postpartum women: Most recent pregnancy only
Not at risk if:	Pregnant woman had diabetes during a previous pregnancy but it was not gestational diabetes (see Risk 343 – Diabetes Mellitus) OR Postpartum woman had gestational diabetes but not during the most recent pregnancy

How is risk assigned?	Certifier selected from risk list in the data system.
Additional documentation	No special requirements.

Risk 304 - History of Preeclampsia

Risk description

History of preeclampsia as diagnosed by a health care provider in any past pregnancy. Preeclampsia is defined as pregnancy induced hypertension with proteinuria developing after the 20th week of pregnancy. This diagnosis can be self reported.

Reason for risk

Women who have had preeclampsia in a prior pregnancy have an increased risk of recurrence. Preeclampsia is characterized by edema (swelling from fluid retention) and kidney failure and is a leading contributor to maternal and perinatal morbidity.

Category	Women
Risk level	Low
At risk if:	Preeclampsia has been diagnosed by a health care provider in any past pregnancy
Not at risk if:	Preeclampsia has not been diagnosed by a health care provider in any past pregnancy
How is risk Assigned?	Certifier selected from risk list in the data system.
Additional documentation	No special requirements.

Risk 311 - History of Preterm or Early Term Delivery

Risk description

A woman who delivered an infant before 39 weeks gestation.

Reason for risk

A woman who had a preterm delivery before 37 weeks gestation or an early term delivery during 37 or 38 weeks gestation in a previous pregnancy is more likely to have another early delivery. Preterm birth can result in numerous health problems and is a leading cause of infant death.

Category	Women
Risk level	Low
At risk if:	Previous pregnancy ended in a birth that was before 39 weeks gestation • Pregnant woman: Any previous pregnancy • Postpartum woman: Most recent pregnancy only
Not at risk if:	Pregnant woman: all previous births were delivered at or after 39 weeks gestation OR Postpartum woman: most recent pregnancy was delivered at or after 39 weeks gestation
How is risk assigned?	Certifier selected from risk list in the data system.
Additional documentation	No special requirements.

Risk 312 - History of Low Birth Weight

Risk description

A woman who gave birth to an infant weighing less than or equal to 5 pounds, 8 ounces in a previous pregnancy.

Reason for risk

A woman who has a history of giving birth to a low birthweight baby is more likely have another low birthweight baby. Adequate prenatal weight gain is associated with decreased risk of delivering a low birthweight baby.

Category	Women
Risk level	Low
At risk if:	The baby from a previous pregnancy weighed less than or equal to 5 pounds, 8 ounces (2500 grams) at birth • Pregnant women: Any previous pregnancy • Postpartum women: Most recent pregnancy only
Not at risk if:	Pregnant women: babies from all previous pregnancies weighed more than or equal to 5 pounds, 9 ounces OR Postpartum women: baby from the most recent pregnancy was not low birth weight
How is risk assigned?	Certifier selected from risk list in the data system.
Additional documentation	No special requirements.

Risk 321 - History of Fetal or Neonatal Loss

Risk description

A woman has a history of fetal or neonatal loss.

Fetal loss is defined as the death of the fetus during pregnancy at greater than or equal to 20 weeks gestation.

Neonatal loss is defined as the death of the infant between birth and 28 days of life.

Reason for risk

A woman who has a history of fetal or neonatal loss in a previous pregnancy is more likely have another fetal or neonatal loss. Adequate nutritional status can help decrease the risk for adverse pregnancy outcomes.

Category	Women
Risk level	Low
At risk if:	Pregnant women: any history of fetal or neonatal loss Breastfeeding women: most recent pregnancy was a multiple birth resulting in the loss of one or more infants and the live birth of one or more infants which is currently being breastfed Non-breastfeeding postpartum: history of fetal or neonatal loss in the most recent pregnancy only

Not at risk if:	No fetal or neonatal loss OR For pregnant women, fetal loss was earlier than 20 weeks gestation OR For postpartum women, fetal or neonatal loss was not from the most recent pregnancy
How is risk assigned?	Certifier selected from risk list in the data system.
Additional documentation	No special requirements.

Risk 331 - Pregnancy at a Young Age

Risk description

A woman who conceived at age 20 years or younger.

Reason for risk

A young adult or adolescent that is pregnant needs additional foods and nutrition to support their own growth and development as well as the growth of the baby.

Category	Women
Risk level	Medium
At risk if:	Less than or equal to 20 years of age at conception • Pregnant woman: Current pregnancy • Postpartum woman: Most recent pregnancy only
Not at risk if:	Greater than or equal to 21 years of age at conception
How is risk assigned?	Data system assigned based on the woman's date of birth and the estimated delivery date entered into the data system.
Additional documentation	No additional documentation is required.

Risk 332 - Closely Spaced Pregnancy

Risk description

A woman's current or most recent pregnancy was conceived less than 18 months after the date of her last live birth (miscarriage and still births are not included).

Reason for risk

A woman needs time to build up her nutrient stores after each pregnancy. If pregnancies are too close together, the woman's nutrient stores may still be depleted which can affect her health and the health of the fetus during pregnancy.

Category	Women
Risk level	Low
At risk if:	Conception less than 18 months from the last delivery • Pregnant Women: Current pregnancy • Postpartum Women: Most recent pregnancy only
Not at risk if:	Conception greater than or equal to 18 months postpartum
How is risk assigned?	Certifier selected after manually calculating length of time between pregnancies.
Additional documentation	No special requirements.

Risk 333 - High Parity and Young Age

Risk description

A woman who is under 20 years old at the time of conception and has had 3 or more pregnancies of at least 20 weeks gestation regardless of birth outcome.

Reason for risk

A woman needs time to build up stores of nutrients in her body after each pregnancy. A young woman, who may still be growing, has increased nutrition needs for her own growth. A woman who has had many pregnancies at a young age may not have enough nutrient stores for a healthy pregnancy.

Category	Women
Risk level	Low
At risk if:	Less than 20 years old at conception and has had 3 or more pregnancies of at least 20 weeks gestation • Pregnant Women: Include current pregnancy • Postpartum Women: Include most recent pregnancy
Not at risk if:	20 years or older OR Less than 3 pregnancies OR Pregnancies did not reach 20 weeks
How is risk assigned?	Certifier selected from risk list in the data system.
Additional documentation	Document the age at conception for each pregnancy.

Risk 334 - Lack of or Inadequate Prenatal Care

Risk description

A woman who has not received adequate prenatal care. Prenatal care is defined as appointments with a health care provider.

Reason for risk

Prenatal care helps women remain healthy during pregnancy. Women with inadequate prenatal care may have more pregnancy and birth complications.

<table>
<tr><td>Category</td><td colspan="2">Pregnant women</td></tr>
<tr><td>Risk level</td><td colspan="2">Low</td></tr>
<tr><td>At risk if:</td><td colspan="2">Prenatal care begins after the first trimester (after 13 weeks gestation)
OR
Woman does not have regular or ongoing prenatal visits, based on the table below:</td></tr>
<tr><td rowspan="6"></td><td>Weeks gestation</td><td>Number of visits</td></tr>
<tr><td>14 - 21</td><td>0</td></tr>
<tr><td>22 – 29</td><td>1 or less</td></tr>
<tr><td>30 – 31</td><td>2 or less</td></tr>
<tr><td>32 – 33</td><td>3 or less</td></tr>
<tr><td>34 or more</td><td>4 or less</td></tr>
<tr><td>Not at risk if:</td><td colspan="2">Prenatal care begins in the first trimester and/or is ongoing</td></tr>
<tr><td>How is risk assigned?</td><td colspan="2">Certifier selected from risk list in the data system.</td></tr>
<tr><td>Additional documentation</td><td colspan="2">Document the number of visits and weeks gestation in the data system.</td></tr>
</table>

Risk 335 - Multiple Fetus Pregnancy

Risk description

A pregnancy with more than one fetus (twins, triplets, etc.).

Reason for risk

A woman with a multiple fetus pregnancy needs more food and nutrients to have a healthy pregnancy.

Category	Women
Risk level	Medium
At risk if:	A pregnancy with more than one fetus (twins or more) • Pregnant women: Current pregnancy • Postpartum women: Most recent pregnancy only
Not at risk if:	Currently pregnant with one fetus OR Delivered one infant OR Multiple birth was not the most recent pregnancy
How is risk assigned?	Data system assigned when multiple fetus pregnancy is indicated in the data system.
Additional documentation	Document number of fetuses (twins, triplets, etc.) in the data system.

Risk 336 - Fetal Growth Restriction

Risk description

A pregnant woman who has been diagnosed with fetal growth restriction (FGR) by a health care provider. This diagnosis can be self reported.

Reason for risk

Fetal growth restriction (also called Intrauterine Growth Restriction) is diagnosed when the fetus does not show normal growth during the pregnancy. FGR often leads to the delivery of low birthweight infants. FGR may be the result of poor nutrition, short pregnancy intervals or smoking.

Category	Pregnant women
Risk level	Low
At risk if:	Health care provider diagnosed fetal growth restriction
Not at risk if:	Fetal growth restriction was not diagnosed by a health care provider
How is risk assigned?	Certifier selects risk from risk list in the data system.
Additional documentation	No special requirements.

Risk 337 - History of Birth of a Large for Gestational Age Infant

Risk description

History of birth of an infant weighing 9 or more pounds.

Reason for risk

A woman who had a large for gestational age infant in the past is more likely to have another during the next pregnancy and is at greater risk for diabetes.

Category	Women
Risk level	Low
At risk if:	Infant from a previous pregnancy was born at greater than or equal to 9 pounds • Pregnant Women: Any previous pregnancy • Postpartum Women: Most recent pregnancy only
Not at risk if:	All previous infants weighed less than 9 pounds at birth OR Infant from the most recent pregnancy weighed less 9 pounds
How is risk assigned?	Certifier selected from risk list in the data system.
Additional documentation	No special requirements.

Risk 338 - Pregnant Woman Currently Breastfeeding

Risk description

A breastfeeding woman who is now pregnant.

Reason for risk

A woman who is pregnant and breastfeeding has higher nutrition needs.

Category	Pregnant women
Risk level	Low
At risk if:	Pregnant woman is currently breastfeeding an infant or child
Not at risk if:	Pregnant woman is not breastfeeding or has recently weaned
How is risk assigned?	Certifier selected from risk list in data system.
Additional documentation	No special requirements.

Risk 339 - History of a Birth with a Congenital Birth Defect

Risk description

History of a birth of an infant with a congenital birth defect related to inappropriate nutritional intake. This includes but is not limited to inadequate zinc (low birthweight), inadequate folic acid (neural tube defects like spina bifida) or excess vitamin A (cleft lip or palate).

Reason for risk

A woman who had an infant with a nutrition related congenital birth defect in the past is more likely to have one during the next pregnancy. Appropriate nutrient supplementation and adequate nutritional intake can support the health of mother and fetus.

Category	Women
Risk level	Low
At risk if:	Infant from a previous pregnancy is born with a congenital birth defect • Pregnant women: Any previous pregnancy • Postpartum women: Most recent pregnancy only
Not at risk if:	Infants from previous pregnancies were born without congenital birth defects OR For postpartum women, infant born with congenital birth defect was not from the most recent pregnancy

How is risk assigned?	Certifier selects risk from risk list in data system.
Additional documentation	Document specific congenital defect in data system.

Risk 341 - Nutrient Deficiency or Disease

Risk description

Any currently treated or untreated nutrient deficiency or disease caused by an insufficient intake of one or more nutrients has been diagnosed by a health care provider. This diagnosis can be self-reported.

Examples of nutrient deficiency diseases include but are not limited to:

- Scurvy [vitamin C deficiency]
- Rickets [vitamin D deficiency]
- Menkes Disease [copper deficiency]
- Hypocalcemia [calcium deficiency]
- Osteomalacia [vitamin D deficiency]
- Vitamin K deficiency
- Beri Beri [vitamin B1 (thiamine) deficiency]
- Pellagra [Niacin deficiency]
- Protein Energy Malnutrition [protein and calorie deficiency]
- Xerophthalmia [vitamin A deficiency]
- Cheilosis [Riboflavin, B6 (pyridoxine) or iron deficiency]

Reason for risk

A nutrient deficiency can result in impaired cognitive function, an impaired immune system or impaired skeletal muscle function. Adequate nutrient intake can help restore nutritional status and promote rehabilitation from the deficiency.

Category	All
Risk level	High

At risk if:	Health care provider diagnosed a nutrient deficiency disease
Not at risk if:	Nutrient deficiency disease has not been diagnosed by a health care provider
How is risk assigned?	Certifier selected from risk list in the data system.
Additional documentation	Document the specific type of nutrient deficiency disease in the data system. Referral to the RD is required.

Risk 342 - Gastrointestinal Disorders

Risk description

A gastrointestinal disease or condition that interferes with the intake or absorption of nutrients has been diagnosed by a health care provider. This diagnosis can be self reported.

Examples include but are not limited to:

- Post-bariatric surgery
- Gastroesophageal reflux disease (GERD)
- Peptic ulcers, stomach or intestinal ulcers
- Small bowel enterocolitis
- Short bowel syndrome
- Malabsorption syndromes
- Inflammatory bowel disease
- Ulcerative Colitis
- Crohn's disease
- Liver disease
- Pancreatitis
- Gall bladder or biliary tract disease

Reason for risk

Gastrointestinal disorders can impact nutritional status by causing restricted food intake, malabsorption of nutrients and excessive loss of fluids and nutrients. Frequent loss of nutrients through vomiting, diarrhea or infections can result in malnourishment and lowered disease resistance.

Category	All
Risk level	High

At risk if:	Health care provider diagnosed a gastrointestinal disorder
Not at risk if:	Gastrointestinal disorder has not been diagnosed by a health care provider
How is risk assigned?	Certifier selected from risk list in the data system.
Additional documentation	Document the specific type of gastrointestinal disorder in the data system. Referral to the RD is required.

Risk 343 - Diabetes Mellitus

Risk description

Type 1 or Type 2 diabetes mellitus has been diagnosed by a health care provider. Diabetes mellitus is characterized by hyperglycemia or high levels of sugar (glucose) in the blood. The usual causes are too little insulin (a hormone produced by the pancreas to regulate blood sugar), resistance to insulin or both. This diagnosis can be self-reported.

Reason for risk

Diet plays an important role when treating both Type 1 and Type 2 diabetes. People who have diabetes are at high risk for numerous health problems.

Category	All
Risk level	High
At risk if:	Health care provider diagnosed Type 1 or Type 2 diabetes mellitus
Not at risk if:	Diabetes mellitus has NOT been diagnosed by a health care provider OR Pregnant woman has gestational diabetes (see Risk 302 – Gestational Diabetes)
How is risk assigned?	Certifier selected from risk list in the data system.
Additional documentation	Referral to the RD is required.

Risk 344 - Thyroid Disorders

Risk description

Thyroid dysfunction, characterized by an abnormal secretion of thyroid hormones, has been diagnosed by a health care provider. This diagnosis can be self reported.

Examples include but are not limited to the following:

- Hyperthyroidism
- Hypothyroidism
- Congenital Hyperthyroidism
- Congenital Hypothyroidism
- Postpartum Thyroiditis

Reason for risk

Thyroid dysfunction affects metabolism and can occur in pregnant or postpartum women, during fetal development and in childhood. Pregnancy outcomes, maternal health and child development can be negatively impacted if the condition is untreated.

Category	All
Risk level	Medium
At risk if:	Health care provider diagnosed a thyroid disorder
Not at risk if:	Thyroid disorder has not been diagnosed by a health care provider
How is risk assigned?	Certifier selected from risk list in the data system.
Additional documentation	Document the specific type of thyroid disorder in the data system.

Risk 345 - Hypertension and Prehypertension

Risk description

Hypertension is defined as high blood pressure. Prehypertension is defined as being at high risk for developing hypertension based on blood pressure levels. Hypertension or prehypertension must be diagnosed by a health care provider and can be self reported. The diagnosis may include the following conditions:

- chronic hypertension
- preeclampsia
- eclampsia
- gestational hypertension

Reason for risk

Individuals with hypertension are at greater risk for health problems such as congestive heart failure, renal disease and cardiovascular disease. Hypertension during pregnancy can result in preeclampsia, low birthweight, fetal growth restriction, and preterm delivery. Lifestyle modifications can help reduce the risk of health complications.

Category	All
Risk level	High
At risk if	Health care provider diagnosed hypertension or prehypertension
Not at risk if	Hypertension or prehypertension has not been diagnosed by a health care provider
How is risk assigned?	Certifier selected from a risk list in the data system.

Additional documentation	Referral to RD is required.

Risk 346 - Renal Disease

Risk description

Renal (kidney) disease has been diagnosed by a health care provider and could include kidney infections, pyelonephritis and persistent proteinuria. Renal disease does not include urinary tract infections or other bladder disorders. This diagnosis can be self reported.

Reason for risk

Individuals with renal disease can have nutritional deficiencies and are often on special diets to control the disease. Infants and children can experience growth failure. A pregnant woman could develop eclampsia or her fetus could experience fetal growth restriction.

Category	All
Risk level	High
At risk if:	Health care provider diagnosed a renal disease, including but not limited to: • Pyelonephritis (kidney infection) • Persistent proteinuria • Polycystic kidneys
Not at risk if:	Renal disease has not been diagnosed by a health care provider OR Participant has a bladder or urinary tract infection (UTI or cystitis)

How is risk assigned?	Certifier selected from risk list in the data system.
Additional documentation	Document the specific type of renal disease in the data system. Referral to the RD is required.

Risk 347 - Cancer

Risk description

Cancer has been diagnosed by a health care provider. This diagnosis can be self reported. The current condition or treatment must be severe enough to affect nutrition status.

Reason for risk

Individuals with cancer are at significant health risk and may be at increased nutrition risk depending on the type and stage of the disease and the progression or type of treatment.

Category	All
Risk level	High
At risk if:	Health care provider diagnosed cancer OR Participant is being treated for cancer such as with radiation or chemotherapy
Not at risk if:	Cancer has not been diagnosed by a health care provider OR Cancer treatment has ended and the participant is in remission
How is risk assigned?	Certifier selected from risk list in the data system.
Additional documentation	Document the specific type of cancer or treatment in the data system. Referral to the RD is required.

Risk 348 - Central Nervous System Disorders

Risk description

A central nervous system disorder has been diagnosed by a health care provider. This diagnosis can be self reported.

Examples include but are not limited to:

- Epilepsy
- Cerebral palsy
- Neural tube defects (spina bifida or myelomeningocele)
- Multiple sclerosis
- Parkinson's disease

Reason for risk

Central nervous system disorders can affect nutrition status due to changes in how food is digested, problems with chewing or swallowing and difficulty feeding oneself. These problems can be caused by the disorder or by the medication used to treat the disorder.

Category	All
Risk level	High
At risk if:	Health care provider diagnosed a central nervous system disorder
Not at risk if:	Central nervous system disorder has not been diagnosed by a health care provider.

How is risk assigned?	Certifier selected from risk list in the data system.
Additional documentation	Document the specific type of central nervous system disorder in the data system. Referral to the RD is required.

Risk 349 - Genetic and Congenital Disorders

Risk description

A genetic or congenital disorder that causes a physical or metabolic abnormality has been diagnosed by a health care provider with. This diagnosis can be self reported.

The condition must alter nutritional status metabolically and/or mechanically. Examples include but are not limited to:

- Esophageal atresia
- Short bowel syndrome
- Cleft lip or palate
- Down Syndrome
- Thalassemia major
- Sickle cell anemia (not sickle cell trait)

Reason for risk

Genetic or congenital disorders can affect nutrition status due to changes in how food is digested, problems with chewing or swallowing or difficulty feeding oneself. Special attention to nutrition is needed to achieve adequate growth and development for children and to maintain health for anyone with these disorders.

Category	All
Risk level	High
At risk if	Health care provider diagnosed genetic or congenital disorder

Not at risk if	Genetic or congenital disorder has not been diagnosed by a health care provider OR Disorder does not cause a physical or metabolic abnormality that affects nutrition status
How is risk assigned?	Certifier selected from risk list in the data system.
Additional documentation	Document the specific type of genetic or congenital disorder in the data system. Referral to the RD is required.

Risk 351 - Inborn Errors of Metabolism

Risk description

An inborn error of metabolism has been diagnosed by a health care provider. This diagnosis can be self reported.

An inborn error of metabolism is a genetic condition that alters metabolism in the body. Examples include but are not limited to:

- Phenylketonuria (PKU)
- Maple Syrup Urine Disease (MSUD)
- Homocystinuria
- Tyrosinemia
- Galactosemia
- Glycogen Storage Disease
- Fructose Aldolase Deficiency
- Hyperlipoproteinuria
- Homocystinuria
- Medium and very long chain acyl-CoA dehydrogenase deficiency
- Long chain 3-hydroxyacyl-CoA dehydrogenase deficiency
- Trifunctional protein deficiency
- Isovaleric acidemia
- Propionic Acidemia
- Beta-ketothiolase deficiency
- Fabry disease
- Gauchers disease
- Pompe disease
- Carnitine uptake effect
- Leber hereditary optic neuropathy
- Mitochondrial encephalomyopathy
- Lactic acidosis and stroke like episodes
- Mitochondrial neurogastrointestinal encephalopathy disease
- Myoclonic epilepsy
- Neuropathy or ataxia
- Retinitis pigmentosa
- Pyruvate carboxylase deficiency
- Zellweger Syndrome

◆ Glutaric Acidemia ◆ Multiple carboxylase deficiency ◆ Methylmalonic Acidemia	◆ Adrenoleukodystrophy ◆ Citrullinemia ◆ Argininosuccinic aciduria ◆ Carbamoyl phosphate synthetase 1 deficiency

Reason for risk

These inherited metabolic disorders are caused by a defect in the enzymes or co-factors that metabolize protein, carbohydrate or fat. Metabolic disorders affect nutrition status and often require special diets.

Category	All
Risk level	High
At risk if:	Health care provider diagnosed a metabolic disorder
Not at risk if:	Metabolic disorder has not been diagnosed by a health care provider
How is risk assigned?	Certifier selected from risk list in the data system.
Additional documentation	Document the specific type of metabolic disorder in the data system. Referral to the RD is required.

Risk 352A - Infectious Diseases - Acute

Risk description

An acute infectious disease has been diagnosed by a health care provider. This diagnosis can be self reported.

Acute infectious disease is characterized by a single episode of relatively rapid onset and short duration. Disease must be present within the past 6 months. Examples include but are not limited to:

◆ Pneumonia	◆ Parasitic Infections
◆ Meningitis (bacterial or viral)	◆ Hepatitis A or E
◆ Bronchitis (3 episodes in last 6 months)	◆ Listeriosis
◆ Tuberculosis	◆

Reason for risk

Infectious diseases can be caused by bacteria, viruses, parasites, or fungi. They can affect nutrition status through poor appetite, low nutrient absorption, accelerated nutrient utilization and/or rapid nutrient loss.

Category	All
Risk level	High
At risk if:	Health care provider diagnosed an acute infectious disease in the past 6 months

Not at risk if:	Infectious disease has not been diagnosed by a health care provider in the past 6 months OR Participant has a cold, flu or ear infection
How is risk assigned?	Certifier selected from risk list in the data system.
Additional documentation	Document the specific type of infectious disease in the data system. Referral to the RD is required.

Risk 352B - Infectious Diseases - Chronic

Risk description

A chronic infectious disease has been diagnosed by a health care provider. This diagnosis can be self reported.

Chronic diseases are those that are long term. The infectious disease must be present within the past 6 months. Examples include but are not limited to:

- Hepatitis B, C or D
- AIDS (Acquired Immunodeficiency Syndrome)
- HIV (Human Immunodeficiency Virus)

Reason for risk

Infectious diseases can be caused by bacteria, viruses, parasites, or fungi. They can affect nutrition status through poor appetite, low nutrient absorption, accelerated nutrient utilization and/or rapid nutrient loss.

Category	All
Risk level	High
At risk if:	Health care provider has diagnosed a chronic infectious disease
Not at risk if:	Infectious disease has not been diagnosed by a health care provider
How is risk assigned?	Certifier selected from risk list in the data system.
Additional documentation	Document the specific type of infectious disease in the data system. Referral to the RD is required.

Risk 353 - Food Allergies

Risk description

A participant has been diagnosed with a food allergy by a health care provider. This diagnosis can be self reported.

Food allergies are adverse health effects caused by a specific immune response that occurs from exposure to a specific food.

Immune response may include asthma, wheezing, coughing, vomiting, nausea, diarrhea, skin rash, hives, and/or anaphylaxis.

Reason for risk

Food allergies can restrict what a person can eat which may affect their nutrition status. The most common causes of food allergies are cow's milk, eggs, peanuts, tree nuts (walnuts, almonds, cashews, pecans, hazelnuts), fish, shellfish (shrimp, lobster, crab, crayfish), wheat and soy.

Category	All
Risk level	Medium
At risk if:	Health care provider diagnosed food allergy
Not at risk if:	Food allergy has not been diagnosed by a health care provider
How is risk assigned?	Certifier selected from risk list in the data system.
Additional documentation	Document the specific type of food allergy in the data system. Consider tailoring food packages to substitute or remove offending foods.

Risk 354 - Celiac Disease

Risk description

Celiac disease has been diagnosed by a health care provider. This diagnosis can be self reported.

Celiac disease is an auto immune response to gluten that results in damage to the small intestine. Celiac disease is also known as:

- Celiac sprue
- Gluten-sensitive enteropathy
- Non-tropical sprue

Reason for risk

Celiac disease causes the small intestine to become inflamed after exposure to the protein gluten from wheat, rye, barley or any by-product of these grains. This damage results in poor absorption of nutrients in food.

Category	All
Risk level	High
At risk if:	Health care provider diagnosed celiac disease
Not at risk if:	Celiac disease has not been diagnosed by a health care provider
How is risk assigned?	Certifier selected from risk list in the data system.
Additional Documentation	Referral to the RD is required.

Risk 355 - Lactose Intolerance

Risk description

Lactose intolerance has been diagnosed by a health care provider. This diagnosis can be self reported.

Lactose intolerance occurs when the body does not produce enough of the enzyme lactase needed to digest lactose. Lactose is a milk sugar naturally occurring in dairy products.

Reason for risk

Lactose intolerance can cause nausea, diarrhea, bloating, gas or cramps after eating or drinking dairy products. Symptoms can range from mild to severe. Limiting use of dairy products could result in an inadequate calcium and vitamin D intake. Lactose intolerance is rare in infants and usually doesn't develop until after two years of age.

Category	All
Risk level	Low
At risk if:	Health care provider diagnosed lactose intolerance
Not at risk if:	Lactose intolerance has not been diagnosed by a health care provider
How is risk assigned?	Certifier selected from risk list in data system.
Additional documentation	Document the symptoms caused by the ingestion of dairy products.

Risk 356 - Hypoglycemia

Risk description

Hypoglycemia is characterized by low blood sugar as diagnosed by a health care provider. This diagnosis can be self reported.

Reason for risk

Hypoglycemia can occur for many reasons including early in pregnancy or as a complication of uncontrolled diabetes, prolonged fasting or strenuous exercise. Nutrition education and diet can help manage and prevent hypoglycemia.

Category	All
Risk level	Low
At risk if:	Hypoglycemia has been diagnosed by a health care provider
Not at risk if:	Hypoglycemia has not been diagnosed by a health care provider
How is risk assigned?	Certifier selected from list of risks in the data system.
Additional documentation	No special requirements.

Risk 357 - Drug Nutrient Interactions

Risk description

Use of an over-the-counter or prescription drug or medication that is known to interfere with nutrient intake, absorption, distribution, metabolism or excretion and has a negative effect on nutritional status.

Reason for risk

Nutrient deficiency caused by an over-the-counter or prescription medication or drug is usually slow to develop and occurs most often in long-term drug treatment of chronic disease. This can impact functions such as bone formation, immune system and energy metabolism.

Possible side effects of drugs that could affect nutritional status include but are not limited to:

- Changes to taste or smell
- Changes to appetite
- Change in nutrient metabolism or absorption
- Stomach upset
- Nausea, vomiting, diarrhea and/or constipation
- A dry or sore mouth
- Increased rate of nutrient excretion in the urine

For the most current information on drug nutrient interactions, refer to a current reference, such as:

- Physician's Desk Reference (available online www.pdrhealth.com)
- Drug packaging inserts
- Food-Medication Interactions
- Medications and Mothers' Milk by Dr. Thomas Hale

Category	All
Risk level	High
At risk if:	Participant is taking an over-the-counter or prescription medication or drug that affects their nutritional status
Not at risk if:	Participant is not taking an over-the-counter or prescription medication or drug OR Use of an over-the-counter or prescription medication or drug is not affecting nutritional status
How is risk assigned?	Certifier selected on the health history questionnaire in the data system.
Additional documentation	Document the specific drug in the data system. Referral to the RD is required.

Risk 358 - Eating Disorders

Risk description

An eating disorder, such as anorexia nervosa, bulimia nervosa or binge-eating disorder is diagnosed by a health care provider. This diagnosis can be self reported.

Reason For risk

Eating disorders seriously impact nutritional status by severely limiting caloric intake and exacerbating nutrient loss. Symptoms of eating disorders include, but are not limited to:

- Self-induced vomiting (purging)
- Laxative abuse
- Alternating periods of starvation
- Use of drugs, such as appetite suppressants, thyroid preparations or diuretics
- Significant, self-induced weight loss

Category	Women
Risk level	High
At risk if:	Health care provider diagnosed an eating disorder
Not at risk if:	Eating disorder has not been diagnosed by a health care provider
How is risk assigned?	Certifier selected from risk list in the data system

Additional documentation	Document the specific eating disorder in the data system. Referral to the RD is required.

Risk 359 - Recent Major Surgery, Physical Trauma or Burns

Risk description

A participant who had:

- Major surgery in the past two months. It is considered major surgery if a body cavity (brain, chest or abdomen) was opened during the surgery. This includes Cesarean section (C-section).
- Physical trauma from a serious accident or injury (broken bones, multiple stitches, etc.)
- Burns that require medical treatment
- All conditions must be severe enough to affect nutrition status. This could also include minor surgeries with major complications if nutrition status is affected.

Reason for risk

Recovery from major surgery, physical trauma or burns requires a high nutrient intake. Additional protein, calories and vitamin/mineral intake can help replace nutrients lost during the recovery from surgery or injury.

Category	All
Risk level	Low
At risk if:	Participant had major surgery (including C-section), physical trauma, or burns within the past 2 months OR More than 2 months ago and needing continued nutritional

	support as diagnosed by a health care provider
Not at risk if:	Participant had minor surgery such as: • Laparoscopic surgery without complication • Mole removal • Biopsy • Oral surgery • Tubes placed in ears • Tonsillectomy OR Major surgery, physical trauma or burns that occurred more than two months ago without the need for ongoing nutritional support
How is risk assigned?	Certifier selected from risk list in data system.
Additional documentation	Document the specific type of surgery, physical trauma or burns in the data system.

Risk 360 - Other Medical Conditions

Risk description

Medical diseases or conditions diagnosed by a health care provider that affect nutrition status and are not included in any other risk. The diagnosis can be self reported. Examples include but are not limited to:

- Juvenile Idiopathic Arthritis (JIA)
- Systemic Lupus Erythematosus (SLE)
- Cardiorespiratory Disease
- Cardiovascular (Heart) Disease
- Cystic Fibrosis
- Polycystic Ovary Syndrome (PCOS)
- Persistent Asthma (moderate or severe) requiring daily medication or daily breathing treatment

Reason for risk

These conditions (or the medications needed to treat these conditions) are stressful to the body and can prevent adequate growth and impact nutrient stores.

Category	All
Risk level	High
At risk if:	Health care provider diagnosed a medical condition that affects nutrition status and is not addressed by any other risk
Not at risk if:	Medical condition has not been diagnosed by a health care provider OR Medical condition does not affect nutrition status (example: heart murmur) OR Medical condition is addressed by another risk
How is risk assigned?	Certifier selected from risk list in the data system.
Additional documentation	Document the specific type of medical disease or condition in the data system. Referral to the RD is required.

Risk 361 - Mental Illnesses

Risk description

A pregnant, postpartum or child participant has been diagnosed by a health care provider with a mental illness where the current condition or treatment for the condition may affect nutritional status. This diagnosis can be self reported.

Reason for risk

The prevalence of mental illness in U.S. adults in 2019 was 20.6% - one in five. Mental illnesses can vary in impact from mild to severe. The prenatal and postnatal periods are a common time for the relapse of mental illnesses such as depression, bipolar disorder, and anxiety disorders since women may choose not to take their medications while pregnant or breastfeeding. Depression is common during pregnancy and the postpartum period.

Children whose parents have a mental illness are at risk for developing social, emotional, and behavioral problems. Mental illnesses or serious emotional disturbances can occur in children. Symptoms in children are observed as serious changes in the way they typically learn, behave, or handle their emotions, which cause distress and problems getting through the day. The diagnosis is often made in the school years or sometimes earlier.

Examples of mental illnesses that may fall into this risk:

- Depression and Postpartum Depression
- Anxiety Disorders
- Personality Disorders
- Post-Traumatic Stress Disorder (PTSD)
- Bipolar Disorders
- Schizophrenia
- Attention-Deficit/Hyperactivity Disorder (ADHD)
- Obsessive-Compulsive Disorder (OCD)

In Oregon, the Postpartum Support International is one resource with a support warm line that can be accessed at 800-944-4PPD (1-800-944-4773).

Category	Pregnant, Postpartum and Children
Risk level	Medium
At risk if:	Health care provider diagnosed a mental illness
Not at risk if:	A mental illness has not been diagnosed by a health care provider

How is risk assigned?	Certifier selected from risk list in the data system
Additional Documentation	Document the diagnosis and symptoms of the mental illness experienced by the participant and any treatment or intervention that they may be receiving

Risk 362 - Developmental, Sensory or Motor Disabilities Interfering with Eating

Risk Description

A participant who requires a tube feeding to meet nutritional needs.

OR

A participant who has a developmental, sensory or motor disability that restricts the ability to chew or swallow food. Disabilities include but are not limited to:

- Minimal brain function
- Developmental delays
- Autism
- Birth injury
- Head trauma
- Brain damage

Reason for risk

Participants with this risk may have nutritional deficiencies due to difficulty eating.

Category	All
Risk level	High
At risk if:	Participant is tube fed or has a developmental, sensory or motor disability that interferes with eating
Not at risk if:	Participant has a developmental, sensory or motor disability but is able to eat foods appropriate for age

How is risk assigned?	Certifier selected from risk list in the data system.
Additional documentation	Document the type of developmental, sensory or motor delay in the data system. Referral to the RD is required.

Risk 363 - Pre-Diabetes

Risk description

A postpartum woman (breastfeeding or non-breastfeeding) with a diagnosis of pre-diabetes as diagnosed by a health care provider. This diagnosis can be self reported.

Pre-diabetes is defined as impaired fasting glucose or impaired glucose tolerance characterized by hyperglycemia (high blood sugar) that does not meet the diagnosis of diabetes mellitus.

Reason for risk

A pre-diabetes diagnosis indicates a high risk of development of diabetes and cardiovascular disease.

Category	Postpartum women
Risk level	High
At risk if:	Pre-diabetes has been diagnosed by a health care provider in any past pregnancy.
Not at risk if:	Pre-diabetes was not diagnosed by a health care provider in any past pregnancy.
How is risk assigned?	Certifier selected from risk list in the data system.
Additional documentation	Referral to the RD is required.

Risk 371 - Nicotine and Tobacco Use

Risk description

Any use of products that contain nicotine and/or tobacco including but not limited to cigarettes, pipes, cigars, electronic nicotine delivery systems (e-cigarettes, vaping devices), hookahs, smokeless tobacco (chewing tobacco, snuff) or nicotine replacement therapies (gums, patches).

Reason for risk

Smoking or vaping during pregnancy is a health risk to the fetus and can cause birth complications. Smoking can decrease the production of breast milk. Women who use products containing nicotine and/or tobacco are at increased risk for chronic diseases.

Category	Women
Risk level	Low
At risk if:	Woman is using nicotine and/or tobacco containing products including but not limited to: • Cigarettes • E-cigarettes • Vape pens • Pipes • Cigars • Hookahs • Chewing tobacco • Snuff • Nicotine gum or patches
Not at risk if:	Woman is not currently using any nicotine or tobacco containing products.
How is risk assigned?	Data system assigned based on information entered into the system.
Additional documentation	Identify what nicotine and/or tobacco products are being used.

Risk 372 - Alcohol and Substance Use

Risk description

Any use of alcohol or drugs during pregnancy or any use of drugs or excessive use of alcohol during the postpartum period. Drug use includes but is not limited to marijuana, cocaine, heroin and methamphetamine.

Reason for risk

Drinking alcohol or using drugs (either legal or illegal) during pregnancy is a health risk to the fetus and can cause birth complications. Drug use and heavy alcohol use are contraindicated during breastfeeding because the substances are passed to the nursing baby via breast milk.

All women participants should be advised that drugs and alcohol use are harmful when pregnant, can interfere with breastfeeding and impact the ability to appropriately provide infant care. Referrals to alcohol or drug cessation programs should be offered as needed.

Category	Women
Risk level	Medium
At risk if:	Pregnant women: • Any alcohol use • Any illegal substance use • Any abuse of prescription medications • Any marijuana use in any form Postpartum women: • High risk drinking: Routine use of 8 or more drinks per week or 4 or more drinks per day

	• Binge drinking – 4 or more drinks within 2 hours • Any illegal substance use • Any abuse of prescription medications • Any marijuana use in any form for breastfeeding women only
Not at risk if:	Woman is not drinking alcohol or using drugs OR Postpartum woman occasionally has one alcoholic drink
How is risk assigned?	Data system assigned based on information entered into the data system.
Additional documentation	Document the specific type of drug use or frequency and type of alcohol use in the data system.

Risk 381 - Oral Health Conditions

Risk description

Oral health conditions are diagnosed by the dental or health care provider. This diagnosis can be self reported. Conditions include but are not limited to:

- Tooth decay
- Periodontal disease such as gingivitis or periodontitis
- Tooth loss
- Ineffectively replaced teeth
- Oral infections

Reason for risk

Oral health conditions can affect the ability to eat food in adequate quality and quantity to maintain good health. For pregnant women, oral infections can be a health risk to the fetus.

Category	All
Risk Level	Low
At risk if:	Oral health condition has been diagnosed by a health care provider
Not at risk if:	Oral health condition has not been diagnosed by a health care provider.
How is risk assigned?	Certifier selected from risk list in the data system.
Additional documentation	Document the specific type of oral health condition in the data system.

Risk 382 - Fetal Alcohol Spectrum Disorders

Risk description

Fetal Alcohol Spectrum Disorders are a group of conditions that occur in a person whose mother consumed alcohol while pregnant. Diagnosis must be made by a health care provider and can be self reported. Diagnosis may include:

- Fetal alcohol syndrome
- Partial fetal alcohol syndrome
- Alcohol related birth defects
- Alcohol related neurodevelopmental disorders

Reason for risk

Fetal Alcohol Spectrum Disorders are characterized by a combination of irreversible birth defects attributed solely to alcohol consumption during pregnancy. These may include slow growth, delayed development, behavioral disorders and learning disabilities.

Category	Infants, Children
Risk level	High
At risk if:	Health care provider diagnosed a fetal alcohol spectrum disorder
Not at risk if:	Fetal alcohol spectrum disorder has not been diagnosed by a health care provider
How is risk assigned?	Certifier selected from risk list in the data system.

Additional documentation	Document the specific disorder. Referral to the RD is required.

Risk 383 - Neonatal Abstinence Syndrome

Risk Description

Neonatal Abstinence Syndrome (NAS) is a drug withdrawal syndrome that occurs among drug exposed infants as a result of the mother's use of drugs during pregnancy. This risk may be assigned up to 12 months of age if the condition was present and diagnosed by the health care provider within 6 months of birth. This diagnosis can be self reported by the infant's care giver.

Reason for Risk

NAS usually affects the nervous system and the gastrointestinal tract. Loud, high pitched crying, sweating, sleep disturbances, feeding difficulties, poor weight gain, diarrhea and spitting up are examples of common symptoms.

Category	Infants
Risk Level	High
At risk if:	NAS is diagnosed by a health care provider within 6 months of birth
NOT at risk if:	NAS is not diagnosed by a health care provider within 6 months of birth
How is Risk Assigned?	Certifier selected from risk list in the data system.
Additional Documentation	Document symptoms and type of drug exposure if known. A referral to the RD is required.

Risk 401 - Presumed Dietary Eligibility for Women and Children 2 to 5 years

Risk Description

Women and children (age 2 years and older) that meet the eligibility requirements for WIC may be presumed to be at nutrition risk based for an inability to meet the Dietary Guidelines for Americans.

Reason for Risk

Evidence shows that nearly all low-income women of childbearing age and children ages 2-5 years are at dietary risk and will benefit from WIC services that support healthy foods choices and age-appropriate physical activities as recommended in the Dietary Guidelines for Americans. Education on nutrition-related topics of interest to the participant such as meal preparation, feeding relationships and family meals can reinforce lifestyle behaviors that lead to positive health outcomes.

Category	Women, Children 2 to 5 years
Risk Level	Low
At risk if:	Woman or child age 2 years or older have had a complete nutrition assessment performed AND No other nutrition risks have been identified

Not at risk if:	Child under age 2 years OR A complete nutrition assessment has not been performed OR Another risk has been identified
How is risk assigned?	Certifier selected from risk list in the data system after a complete assessment when no other risk has been assigned.
Additional documentation	No special requirements.

Risk 411.1 - Use of Substitutes for Breastmilk or Formula

Risk Description

Routine use of substitutes for breastmilk or iron fortified formula as the primary nutrient source for infants under one year of age.

Reason for Risk

Feeding a low iron formula can compromise an infant's iron stores. Cow's milk, goat's milk, imitation milk beverages and homemade formulas have insufficient and inappropriate amounts of nutrients for infants and can cause iron deficiency, stress on the kidneys and allergic reactions.

Category	Infants
Risk level	Low
At risk if:	Infant is routinely being fed a substitute for breastmilk or formula such as: • Low iron formula without iron supplementation • Cow's milk • Goat's milk • Canned evaporated milk • Sweetened condensed milk • Rice or soy based imitation milk products • Other "homemade concoctions"

Not at risk if:	Infant's primary source of nutrients is breastmilk or iron fortified formula
How is risk assigned?	Certifier selected when entering information into the data system.
Additional documentation	Document the specific substitute being offered in the data system.

Risk 411.2 - Inappropriate Use of Bottles or Cups

Risk Description

Bottles or cups are routinely used inappropriately by an infant.

Reason for Risk

Prolonged use of baby bottles during either the day or night and routinely drinking sweetened beverages contributes to tooth decay. Solid foods such as cereal should not be put into a bottle for feeding because it does not encourage the infant to eat solid foods in a developmentally appropriate way.

Category	Infants
Risk level	Low
At risk if:	Infant is routinely using bottles or cups inappropriately. Examples include, but are not limited to: • Using a bottle to drink juice • Feeding any sugary drinks such as soda, Kool-Aid®, sports drinks, gelatin water or sweetened tea in a bottle or cup • Allowing the infant to fall asleep or to be put to bed with a bottle at naps or bedtime • Allowing the infant to use a bottle without restriction such as walking around with a bottle or using a bottle as a pacifier

	• Propping the bottle while feeding • Allowing the infant to carry around and drink from a covered training cup throughout the day • Adding any food such as cereal or other solids to the bottle
Not at risk if:	Infant is using bottles or cups appropriately
How is risk assigned?	Certifier selected when entering information into the data system.
Additional Documentation	Document the specific inappropriate use in the data system.

Risk 411.3 - Early Introduction of Beverages or Solid Foods

Risk Description

Routinely offering foods or beverages that are inappropriate for the infant's stage of development.

Reason for Risk

Feeding solid foods or beverages too early interferes with establishing good eating habits and can contribute to overfeeding. Digestion of solids is inefficient and potentially harmful for infants prior to four months of age. Sweetening agents added to food, beverages or pacifiers can promote the development of childhood caries. Introducing other beverages to an exclusively breastfeed infant may reduce the number of times the infant nurses.

Category	Infants
Risk level	Low
At risk if:	Infant is being offered food or beverage (other than breast milk or iron fortified formula) before 6 months of age OR Sugar, honey, or syrup is added to any food, beverage or pacifier.
Not at risk if:	Infant is being fed appropriately for age
How is risk assigned?	Certifier selected when entering information into the data system.
Additional documentation	No special requirements.

Risk 411.4 - Inappropriate Feeding Practices

Risk Description

Routine use feeding practices that disregard the developmental needs or stage of the infant.

Reason for Risk

Infants are born with the ability to regulate their food intake based on hunger, appetite and fullness. The feeding relationship between a caregiver and an infant influences an infant's ability to develop feeding skills and to eat a nutritionally adequate diet. A poor feeding relationship can result in poor dietary intake and impaired growth.

Category	Infants
Risk level	Low
At risk if:	A feeding practice that disregards the developmental need of the infant is routinely being used. Examples include, but are not limited to: • Inability to recognize, insensitivity to or disregarding the infant's cues for hunger or fullness • Feeding foods of inappropriate consistency, size or shape that puts the infant at risk for choking • Not supporting an infant's need for increased independence with self-feeding, such as solely spoon

	feeding an infant who is able and ready to finger feed and/or trying to self-feed with appropriate utensils • Feeding an infant food with inappropriate textures based on his/her developmental stage, such as feeding primarily pureed or liquid foods when the infant is ready and capable of eating mashed, chopped or appropriate finger foods
Not at risk if:	Appropriate feeding practices are used to feed the infant
How is risk assigned?	Certifier selected when entering information into the data system.
Additional documentation	Document the specific inappropriate feeding practice in the data system.

Risk 411.5 - Feeding Potentially Harmful Foods

Risk Description

Feeding foods to an infant that could be contaminated with harmful microorganisms or toxins.

Reason for Risk

The American Academy of Pediatrics recommends that certain foods should not be fed to infants in order to prevent food-borne illness.

Category	Infants
Risk level	Low
At risk if:	Infant is fed potentially harmful foods. Examples of potentially harmful foods include, but are not limited to: • Raw or undercooked meat, poultry fish • Undercooked eggs such as in cookie or cake batters, salad dressings or unpasteurized eggnog • Hot dogs, lunch meat, processed meats and other deli style meat or poultry (unless reheated until steaming hot) • Unpasteurized milk or foods containing unpasteurized milk • Any soft cheese or fresh cheeses made with unpasteurized milk, such as feta, brie, camembert,

	blue-veined, queso blanco, queso fresco or panela • Unpasteurized fruit or vegetable juices • Raw vegetable sprouts such as alfalfa, clover, bean or radish • Honey added to liquids or foods, used in cooking as part of processed foods or on a pacifier • Donor breastmilk obtained directly from an individual or the internet
Not at risk if:	Infant is fed foods that are not potentially harmful
How is risk assigned?	Certifier selected when entering information into the data system.
Additional documentation	Document the specific food in the data system.

411.6 - Incorrect Dilution of Formula

Risk Description

Routinely feeding an infant inappropriately diluted formula.

Reason for Risk

Incorrect preparation of formula can have severe health consequences for infants. Over-dilution of formula can result in excess water intake and inadequate nutrient intake causing failure to thrive and poor growth. Under-dilution of formula can result in dehydration and metabolic acidosis from excess intake of protein and minerals.

Category	Infants
Risk level	Low
At risk if:	Infant is being fed formula that is being diluted incorrectly, including: • Failure to follow manufacturer's dilution instructions • Failure to follow specific instructions accompanying a formula prescription
Not at risk if:	Infant is being fed formula that has been correctly diluted OR Infant receives no formula
How is risk assigned?	Certifier selected when entering information into the data system.
Additional documentation	Document the specific issue with formula dilution in the data system.

Risk 411.7 - Infrequent Breastfeeding

Risk Description

Routinely limiting the frequency of nursing for the exclusively breastfed infant when breastmilk is the sole source of nutrients.

Reason for Risk

Exclusive breastfeeding provides ideal nutrition for an infant during the first 6 months of life. Frequent breastfeeding is necessary for the mother to establish and maintain an adequate milk supply and to ensure that an infant achieves optimal growth and development. Infrequent breastfeeding can result in dehydration, poor weight gain, illness and malnourishment for the infant.

Category	Exclusively Breastfed Infants
Risk level	Medium
At risk if:	Exclusively breastfed infants intake is limited to: • Scheduled feedings instead of demand feedings • Less than 8 feedings in 24 hours if less than 2 months of age
Not at risk if:	Exclusively breastfed infant is fed frequently and on demand with appropriate weight gain
How is risk assigned?	Certifier selected when entering information into the data system.

Additional documentation	No special requirements.

411.8 - Feeding a Very Low Calorie or Nutrient Diet

Risk Description

Routinely feeding an infant a diet very low in calories and/or essential nutrients.

Reason for risk

Highly restrictive diets prevent adequate intake of nutrients, interfere with growth and development and may lead to other adverse physiological effects. The more limited the diet, the greater the health risk.

Category	Infants
Risk level	Low
At risk if:	Infant is routinely fed a diet very low in calories and/or essential nutrients. Examples include, but are not limited to: • Vegan diet • Macrobiotic diet • Inadequate formula
Not at risk if:	Infant is fed a diet with appropriate calories and nutrients
How is risk assigned?	Certifier selected when entering information into the data system.
Additional documentation	Document the specific diet in the data system.

Risk 411.9 - Improper Handling of Expressed Breastmilk or Formula

Risk description

Routinely using inappropriate sanitation in the preparation, handling and/or storage of expressed breast milk or formula.

Reason for risk

Infant formula and expressed breast milk are perishable foods and must be prepared, handled and stored in a sanitary manner to be safe for infant consumption.

Category	Infants
Risk level	Low
At risk if:	Expressed breast milk or formula is prepared, handled or stored with inappropriate sanitation. Examples include, but are not limited to: • Limited or no access to a safe water supply • Limited or no access to a heat source for sterilization • Limited or no access to a refrigerator or freezer for storage Failure to properly prepare, handle or store containers of breastmilk or breast pumps properly. Examples include: • Thawing in a microwave • Refreezing • Adding freshly expressed unrefrigerated breast milk to frozen breast milk

	• Adding refrigerated breast milk to frozen milk in an amount that is greater than the amount of frozen milk • Feeding thawed breast milk more than 24 hours after thawing • Saving breast milk from a used bottle for another feeding • Failure to clean the breast pump per manufacturer's instruction • Feeding donor human milk acquired directly from individuals or the internet Failure to properly prepare, handle or store containers of formula properly. Examples include: • Storing at room temperature for more than one hour • Failure to store prepared formula per manufacturer's instructions • Using formula in a bottle one hour after the start of a feeding • Saving formula from a used bottle for another feeding • Failing to clean the bottle properly
Not at risk if:	Expressed breastmilk or formula is prepared, handled and stored in a sanitary manner
How is risk assigned?	Certifier selected when entering information into the data system.
Additional documentation	Document the specific issue in the data system.

Risk 411.10 - Inappropriate Use of Dietary Supplements

Risk Description

Feeding dietary supplements in excess of recommended dosages may be toxic or have potentially harmful consequences when ingested by infants.

Reason for Risk

An infant taking inappropriate or excessive amounts of dietary supplements such as single or multi-vitamins or minerals, botanical (including herbal) remedies or teas that are not prescribed by a physician is at risk for adverse effects such as harmful nutrient interactions, toxicity, and physical abnormalities.

Category	Infants
Risk level	Low
At risk if:	Infant is fed dietary supplements in excess of recommended dosages. Examples include, but are not limited to: • Single or multi-vitamins • Mineral supplements • Herbal or botanical supplements/remedies/teas
Not at risk if:	Infant is not taking dietary supplements OR Infant use of dietary supplements is appropriate

How is risk assigned?	Certifier selected when entering information into the data system.
Additional documentation	Document the inappropriate use of specific dietary supplements in the data system.

Risk 411.11 - Inadequate Fluoride or Vitamin D Supplementation

Risk Description

Fluoride or Vitamin D supplementation is not routinely provided when an infant's diet alone cannot meet these nutrient requirements.

Reason for Risk

Fluoride supplements are beneficial in reducing dental decay for infants living in fluoride deficient areas. Vitamin D supplements are beneficial in prevention of rickets, infections, heart disease, auto immune diseases and some forms of cancer.

Category	Infants
Risk level	Low
At risk if:	**For fluoride:** Infant is age 6 months or older AND The water supply is not fluoridated AND Infant is not receiving 0.25 milligrams of a fluoride supplement daily **For Vitamin D:** Infant drinks less that 1 quart of Vitamin D fortified formula per day OR Infant is exclusively breastfed

	AND Infant is not receiving 400 IU (10 micrograms) of a Vitamin D supplement daily
Not at risk if:	**For fluoride:** Infant is under 6 months of age OR Infant receives fluoridated water OR Infant receives a prescribed fluoride supplement when water supply is not fluoridated **For Vitamin D:** Infant drinks 1 quart of Vitamin D fortified formula per day OR Infant receives a Vitamin D supplement
How is risk assigned?	Certifier selected when entering information into the data system.
Additional documentation	No special requirements.

Risk 425.1 - Inappropriate Beverages as Milk Source

Risk Description

Inappropriate beverages are routinely fed to children as their primary milk source.

Reason for Risk

Unfortified goat's milk and imitation and substitute milk beverages do not contain nutrients in adequate amounts to be an appropriate substitute for milk in a child's diet. Non-fat and reduced fat milk are not recommended for children from 1 to 2 years of age because of the lower caloric density as compared with whole-fat products. Infants and children under age 2 years consuming reduced fat milk gain weight at a slower rate and are at risk of inadequate intake of essential fatty acids.

Category	Children
Risk level	Low
At risk if:	Child is routinely fed an inappropriate beverage as their primary milk source. Examples include but are not limited to: • Non-fat or reduced-fat milk (1% or 2%) between 13 and 23 months of age (unless assigned by a CPA when overweight or obesity is a concern) • Sweetened condensed milk • Unfortified goat's milk or sheep's milk

	• Imitation or substitute milk beverages such as rice, almond or non-dairy creamers that are unfortified • Other "homemade concoctions"
Not at risk if:	Child is fed appropriate milk sources OR Child is over 24 months and drinking reduced fat milk OR Child is drinking fortified goat's milk or WIC provided soy beverages
How is risk assigned?	Certifier selected when entering information into the data system.
Additional documentation	Document the specific beverage in the data system.

Risk 425.2 - Feeding Sweetened Beverages

Risk Description

Sweetened beverages are routinely fed to a child.

Reason for Risk

Sugar, especially sucrose, is the major dietary cause of dental caries. Drinking beverages containing sugar increases the risk of early childhood caries and tooth decay.

Category	Children
Risk level	Low
At risk if:	Child is routinely fed sweetened beverages. Examples include, but are not limited to: • Soda • Kool-Aid® • Sports drinks • Juice drinks • Gelatin water • Corn syrup solutions • Sweetened tea
Not at risk if:	Child is not routinely fed sweetened beverages
How is risk assigned?	Certifier selected when entering information into the data system.
Additional documentation	Document the specific sweetened beverage in the data system.

Risk 425.3 - Inappropriate Use of Bottles, Cups or Pacifiers

Risk Description

Inappropriate use of bottles, covered training cups or pacifiers by a child on a routine basis.

Reason for Risk

Prolonged use of bottles beyond 14 months of age and/or frequent use of bottles during the day or night can contribute to tooth decay. Use of high sugar substances such as dipping pacifiers in syrup, sugar or honey can also contribute to tooth decay. Solid foods such as cereal should not be put into a bottle for feeding because this does not encourage the child to eat in a developmentally appropriate way.

Category	Children
Risk level	Low
At risk if:	Child is routinely using bottles, covered training cups or pacifiers improperly. Examples include, but are not limited to: • Using a bottle beyond 14 months of age • Using a bottle to drink juice, diluted cereal or other solids • Allowing the child to fall asleep or to be put to bed with a bottle, at naps or bedtime

	• Allowing the child to use a bottle without restriction, such as walking around with a bottle or using a bottle as a pacifier • Allowing the child to carry around and drink throughout the day from a covered training cup • Dipping pacifier in sugar, honey or syrup
Not at risk if:	Child uses bottles, cups or pacifiers appropriately for age and stage of development
How is risk assigned?	Certifier selected when entering information into the data system.
Additional documentation	Document the specific inappropriate use in the data system.

Risk 425.4 - Inappropriate Feeding Practices

Risk Description

Routine use of feeding practices that do not consider the developmental needs or stage of the child.

Reason for Risk

The feeding relationship between caregiver and child influences the child's ability to develop feeding skills and eat a nutritionally adequate diet. A poor feeding relationship that ignores feeding cues and child development can result in poor dietary intake and impaired growth.

Category	Children
Risk level	Low
At risk if:	A feeding practice that disregards the developmental need of the child is routinely being used. Examples include but are not limited to: • Inability to recognize, insensitivity to or disregarding the child's cues for hunger or fullness • Feeding foods of inappropriate consistency, size or shape that puts the child at risk for choking • Not supporting a child's need for increased independence with self-feeding such as solely spoon feeding a child who is able and

	ready to finger feed and/or trying to self-feed with appropriate utensils • Feeding foods with inappropriate textures based on a child's developmental stage, such as feeding primarily pureed or liquid foods when the child is ready and capable of eating mashed, chopped or appropriate finger foods
Not at risk if:	Appropriate feeding practices are used to feed the child
How is risk assigned?	Certifier selected when entering information into the data system.
Additional documentation	Document the specific inappropriate feeding practice in the data system.

Risk 425.5 - Feeding Potentially Harmful Foods

Risk Description

Feeding foods to a child that could be contaminated with harmful microorganisms.

Reason for Risk

The American Academy of Pediatrics recommends that certain foods should not be fed to young children in order to prevent food-borne illness.

Category	Children
Risk level	Low
At risk if:	Child is fed potentially harmful foods. Examples of potentially harmful foods include, but are not limited to: • Raw or undercooked meat, poultry or fish • Undercooked eggs such as in cake or cookie batter, salad dressings or unpasteurized eggnog • Hot dogs, lunch meat, processed meats and other deli style meat or poultry (unless reheated until steaming hot) • Unpasteurized milk or foods containing unpasteurized milk

	• Any soft cheese or fresh cheeses made with unpasteurized milk, such as feta, brie, camembert, blue-veined, queso fresco, queso blanco or panela • Unpasteurized fruit or vegetable juices • Raw vegetable sprouts such as alfalfa, clover, bean or radish
Not at risk if:	Child is fed foods that are not potentially harmful
How is risk assigned?	Certifier selected when entering information into the data system.
Additional documentation	Document the specific food in the data system.

Risk 425.6 - Feeding a Very Low Calorie or Nutrient Diet

Risk Description

Routinely feeding a child a diet very low in calories and/or essential nutrients.

Reason for Risk

Highly restrictive diets prevent adequate intake of nutrients, interfere with growth and development and may lead to other adverse physiological effects. The more limited the diet, the greater the health risk.

Category	Children
Risk level	Low
At risk if:	Child is routinely fed a diet very low in calories and/or essential nutrients. Examples include, but are not limited to: • Vegan diet • Macrobiotic diet • Diet is very low in calories and/or essential nutrients
Not at risk if:	Child is fed a diet with appropriate calories and/or nutrients.
How is risk assigned?	Certifier selected when entering information into the data system.
Additional documentation	Document the specific diet in the data system

Risk 425.7 - Inappropriate Use of Dietary Supplements

Risk Description

Dietary supplements such as single or multi-vitamins or minerals, botanical (including herbal) remedies or teas not prescribed by a physician may be toxic or have potentially harmful consequences when taken by children in excess of recommended dosages.

Reason for Risk

A child taking inappropriate or excessive amounts of dietary supplements is at risk for adverse effects that include harmful nutrient interactions, toxicity, and physical abnormalities.

Category	Children
Risk Level	Low
At risk if:	Child is consuming dietary supplements in excess of recommended dosages. Examples include, but are not limited to: • Single or multi-vitamins • Mineral supplements • Herbal or botanical supplements/remedies/teas
Not at risk if:	Child is not taking dietary supplements OR Dietary supplements are used appropriately

How is risk assigned?	Certifier selected when entering information into the data system.
Additional documentation	Document the specific inappropriate dietary supplement in the data system.

Risk 425.8 - Inadequate Fluoride or Vitamin D Supplementation

Risk Description

Fluoride or Vitamin D are not routinely provided for a child when diet alone cannot meet their nutrient requirements.

Reason for Risk

Fluoride supplements are beneficial in reducing dental decay for children living in fluoride deficient areas. Vitamin D supplements are beneficial in prevention of rickets, infections, heart disease, auto immune diseases, some forms of cancer and Vitamin D deficiency. Current intake recommendations for children is 600 IU (15 micrograms) of Vitamin D daily. This risk criteria addresses the minimum level of Vitamin D intake rather than the recommended level of Vitamin D supplementation.

Category	Children
Risk level	Low
At risk if:	**For Fluoride:** The water supply is not fluoridated AND Child under 3 years of age is receiving less than 0.25 milligrams of a fluoride supplement daily OR Child is 3 years to 5 years of age and is receiving less than 0.50 milligrams of a fluoride supplement daily

	For Vitamin D: Child drinks less than 1 quart of Vitamin D fortified milk per day AND Child is not receiving 400 IU (10 micrograms) of a Vitamin D supplement daily
Not at risk if:	Child receives fluoridated water and drinks 1 quart of Vitamin D fortified milk or formula daily OR Child receives appropriate fluoride and Vitamin D supplements.
How is risk assigned?	Certifier selected when entering information into the data system.
Additional documentation	No special requirements.

Risk 425.9 – Pica - Children

Risk Description

A child routinely eats non-food items.

Reason for Risk

Pica is the compulsive ingestion of non-food substances and is linked to lead poisoning and exposure to other toxic substances, anemia, excess calories or displacement of nutrients, gastric and small bowel obstruction, as well as parasitic infection.

Category	Children
Risk Level	Low
At risk if:	The child is compulsively eating non-food items. Examples include but are not limited to: • Ashes • Carpet fibers • Chalk • Cigarettes or cigarette butts • Clay • Dust • Foam rubber • Paint chips • Soil • Starch (laundry or cornstarch)
Not at risk if:	The child is not routinely eating non-food items

How is risk assigned?	Certifier selected when entering information into the data system.
Additional documentation	Document the non-food items eaten in the data system.

Risk 427.1 - Inappropriate Use of Dietary Supplements

Risk Description

Dietary supplements may be toxic or have potentially harmful consequences when taken in excess of recommended dosages by pregnant or postpartum women.

Reason for Risk

Women taking inappropriate or excessive amounts of dietary supplements such as single or multi-vitamins or minerals, or botanical (including herbal) remedies or teas, are at risk for adverse effects such as harmful nutrient interactions, toxicity, and birth defects. Pregnant and lactating women are more at risk because they are potentially affecting both their health and the health of their infant.

Category	Women
Risk level	Low
At risk if:	Woman is taking dietary supplements in excess of recommended dosages. Examples include, but are not limited to: • Single or multi-vitamins • Mineral supplements • Herbal or botanical supplements/remedies/teas

Not at risk if:	Woman is not taking dietary supplements OR Dietary supplements are taken in the recommended dosage
How is risk assigned?	Certifier selected when entering information into the data system.
Additional documentation	Document the specific inappropriate use of dietary supplements in the data system.

Risk 427.2 - Eating a Very Low Calorie or Nutrient Diet

Risk Description

Eating a diet very low in calories and/or essential nutrients including impaired caloric intake and nutrient absorption following bariatric surgery (reducing the size of the stomach) for weight loss.

Reason for Risk

Women consuming highly restrictive diets are at risk for nutrient deficiencies, especially during critical developmental periods such as pregnancy. Pregnant women who restrict their diets may increase the risk of birth defects, poor fetal development and chronic health problems in their children. Breastfeeding women who choose a strict vegan or macrobiotic diet increase the risk for vitamin B12 deficiency for themselves and their infants.

Category	Women
Risk level	Low
At risk if:	Woman is routinely eating a diet very low in calories and/or essential nutrients. Examples include, but are not limited to: • Strict vegan diet • Low carbohydrate, high protein diet • Macrobiotic diet

	• Any diet very low in calories and/or essential nutrients • Recent bariatric surgery
Not at risk if:	Woman consumes a diet adequate in calories and essential nutrients
How is risk assigned?	Certifier selected when entering information into the data system.
Additional Documentation	Document the specific diet in the data system.

Risk 427.3 – Pica - Women

Risk Description

Compulsively eating non-food items.

Reason for Risk

Pica is the compulsive ingestion of non-food substances over a sustained period of time and is linked to lead poisoning and exposure to other toxic substances, anemia, excess calories or displacement of nutrients, gastric and small bowel obstruction, as well as parasitic infection.

Category	Women
Risk level	Low
At risk if:	Woman is compulsively eating non-food items over a sustained period of time. Examples of non-food items include, but are not limited to: • Ashes • Baking Soda • Burnt matches • Carpet fibers • Chalk • Cigarettes • Clay • Dust • Large quantities of ice or freezer frost • Paint chips • Soil • Starch (laundry or cornstarch)

Not at risk if:	Woman is not eating non-food items
How is risk assigned?	Certifier selected when entering information into the data system.
Additional documentation	Document the non-food items eaten in the data system.

Risk 427.4 - Inadequate Iron, Iodine or Folic Acid Supplementation

Risk Description

Inadequate supplementation of iron, iodine or folic acid for pregnant or postpartum women.

Reason for Risk

Iron is an important component of blood that is needed for a healthy pregnancy. Most pregnant women cannot maintain adequate iron stores without taking iron supplements to meet their increased iron requirements.

Iodine deficiency during pregnancy and breastfeeding can adversely affect cognitive development in children. Taking a vitamin that contains iodine is recommended.

Postpartum women of childbearing age who do not take adequate amounts of folic acid are at greater risk for folate deficiency which has been proven to cause neural tube defects such as spina bifida and anencephaly.

Category	Women
Risk level	Low
At risk if:	Pregnant woman consuming less than 27 milligrams of supplemental iron daily OR Pregnant or breastfeeding woman consuming less than 150 micrograms of supplemental iodine daily

	OR Postpartum woman consuming less than 400 micrograms of folic acid from fortified foods and/or supplements daily
Not at risk if:	Woman is consuming adequate amounts of iron, iodine and folic acid
How is risk assigned?	Certifier selected when entering information into the data system.
Additional documentation	No special requirements.

Risk 427.5 - Eating Potentially Harmful Foods

Risk Description

Pregnant woman is eating foods that could be contaminated with harmful microorganisms.

Reason for Risk

Pregnant women are especially at risk for foodborne illness and should be advised not to eat foods identified as potentially harmful. Food-borne illness during pregnancy can result in infection, leading to premature delivery, miscarriage, fetal death, and severe illness or death of a newborn.

Category	Pregnant women
Risk level	Low
At risk if:	Pregnant woman is eating potentially harmful foods. Examples include but are not limited to: • Raw or undercooked meat, poultry, fish or shellfish • Raw or undercooked eggs, or foods containing raw or lightly cooked eggs, including: salad dressings, cookie and cake batters, sauces, and beverages such as unpasteurized eggnog • Refrigerated, smoked seafood, unless it is an ingredient in a cooked dish

	• Hot dogs, lunch meat, fermented or dry sausage and other deli style meat or poultry (unless reheated until steaming hot) • Refrigerated paté or meat spreads • Unpasteurized milk or foods containing unpasteurized milk • Any soft cheese or fresh cheeses made with unpasteurized milk, such as feta, brie, camembert, blue-veined and Mexican style cheese such as queso blanco, queso fresco, or panela • Unpasteurized fruit or vegetable juices • Raw vegetable sprouts such as alfalfa, clover, bean or radish
Not at risk if:	Pregnant woman is not eating potentially harmful foods
How is risk assigned?	Certifier selected from information entered into the data system.
Additional documentation	Document the specific food in the data system.

Risk 428 - Presumed Dietary Eligibility for Infants and Children 4 to 23 months

Risk Description

Infants and young children between the ages of 4 to 23 months may be presumed to be at nutrition risk for inappropriate complementary feeding practices. Complementary feeding is the gradual addition of foods and beverages to the diet of an infant or young child. An infant or child is at risk for inappropriate complementary feeding when they are:

- Eating solid foods
- Learning to feed themselves
- Weaning from breastmilk or formula
- Transitioning from infant foods to table foods

Reason for Risk

Adding complementary foods to an infant or child's diet can be challenging. To manage complementary feeding successfully, caregivers must make decisions about what, when, where, and how to offer foods according to the infant or child's:

- Requirement for energy and nutrients
- Fine, gross, and oral motor skills
- Emerging independence and desire to self feed
- Need to learn healthy eating habits through exposure to a variety of nutritious foods

Category	Infants ages 4 to 12 months, Children ages 13 to 23 months
Risk level	Low

At risk if:	An infant at or between 4 and 12 months of age or a child at or between 13 to 23 months of age has had a complete nutrition assessment performed AND No other risk has been identified
Not at risk if:	Infant is under 4 months of age OR Child is over age 2 years OR A complete nutrition assessment has not been performed OR Another risk has been identified
How is risk assigned?	Certifier selected from risk list in data system.
Additional documentation	No special requirements.

Risk 501 – Possibility of Regression

Risk description

A participant who has previously been certified eligible for WIC, has no other nutrition risk and may have a regression in their nutrition status without WIC benefits. This risk cannot be used for pregnant women.

Reason for Risk

Regression means that the participant may once again become at risk if they no longer participate on WIC. This risk may be used to allow participants more time on the program to build their nutrient stores and prevent regression.

Category	Infants, Children, Postpartum women
Risk level	Low
At risk if:	Participant could have a regression in nutrition status if they do not receive WIC benefits for the next certification period
Not at risk if:	Participant is not at risk for regression
How is risk assigned?	Certifier selected from risk list in the data system.
Additional documentation	Document the reason for possible regression in the data system.

Risk 502 - Transfer of Certification

Risk description

This risk would be used when a participant is transferring into a WIC agency with valid Verification of Certification (VOC) documentation that does not include their nutrition risk.

Reason for risk

All participants shall be transferred into an agency if they have a valid VOC card.

Category	All
Risk	Low
At risk if:	VOC card does not show nutrition risk used for certification OR Participant was certified using a risk that Oregon does not use
Not at risk if:	VOC card includes a valid risk code in use in Oregon
How is risk assigned?	Certifier or clerical staff selects this risk from the risk list in the data system.
Additional documentation	No special requirements

Risk 601 – Breastfeeding Mother of Infant at Nutritional Risk

Risk description

A breastfeeding woman (pregnant or postpartum) whose breastfeeding infant has been determined to be at nutritional risk.

Reason for risk

The breastfeeding mother of an at-risk infant needs to stay in good health to support the infant's intake, growth and development. Breastfeeding mother must be at the same risk level in the data system as the infant.

Category	Breastfeeding Women
Risk level	Low
At risk if:	The infant of a breastfeeding woman has been certified on WIC with a nutrition risk
Not at risk if:	The infant is not breastfeeding OR The breastfed infant is not at nutritional risk
How is risk assigned?	Certifier selected from risk list in the data system.
Additional documentation	No special requirements.

Risk 602 - Breastfeeding Complications or Potential Complications for Women

Risk description

A breastfeeding woman (pregnant or postpartum) with breastfeeding problems or potential problems.

Reason for risk

Breastfeeding complications can have an impact on milk supply and successful feeding of the breastfed infant.

Category	Breastfeeding Women
Risk Level	Medium
At risk if:	Woman has any of the following breastfeeding complications or potential complications: • Severe breast engorgement • Recurrent plugged ducts • Mastitis (fever or flu-like symptoms with localized breast tenderness) • Flat or inverted nipples • Cracked, bleeding or severely sore nipples • 40 years of age or older • Failure of milk to come in by 4 days postpartum • Tandem nursing (breastfeeding two siblings who are not twins)

Not at risk if:	Woman is not breastfeeding OR Breastfeeding woman does not have breastfeeding complications
How is risk assigned?	Certifier selected from risk list in the data system.
Additional documentation	Document the specific type of breastfeeding problem in the data system. Referral to a breastfeeding specialist is recommended.

Risk 603 - Breastfeeding Complications or Potential Complications for Infants

Risk description

A breastfeeding infant with problems breastfeeding.

Reason for risk

Breastfeeding complications can have a serious impact on the breastfed infant's intake and health.

Category	Infants
Risk level	Medium
At risk if:	Infant has the following breastfeeding complications or potential complications: • Jaundice • Weak or ineffective suck • Difficulty latching onto the breast • Inadequate stooling (as determined by a health care professional) • Less than 6 wet diapers per day
Not at risk if:	Infant is not breastfeeding OR Infant does not have breastfeeding complications
How is risk assigned?	Certifier selected from risk list in data system.
Additional documentation	Document the specific type of breastfeeding complication in the data system. Referral to a breastfeeding specialist is recommended.

Risk 701 - Infant Up to 6 Months Old of WIC Mom or WIC Eligible Mom

Risk description

An infant under 6 months old who was born to a woman that was a WIC participant during her pregnancy or born to a woman who would have been eligible for WIC during her pregnancy because of an anthropometric, biochemical or nutritionally related medical condition.

Reason for risk

WIC can help prevent health risks associated with babies born to women that were at risk during their pregnancies.

Category	Infants under 6 months
Risk level	Low
At risk if:	Infant is less than 6 months old AND The infant's mother was on WIC during pregnancy OR The infant's mother was not on WIC but had a nutrition risk that would have qualified her for WIC
Not at risk if:	Infant is over 6 months old OR Infant's mother did not have a nutrition risk during pregnancy

How is risk assigned?	Certifier selected from risk list in the data system.
Additional documentation	If the mom was not on WIC during her pregnancy, document the risk(s) that would have qualified her for WIC in the data system.

Risk 702 - Breastfeeding Infant of a Woman at Nutritional Risk

Risk description

A breastfeeding infant whose mother has been determined to be at nutritional risk.

Reason for risk

A breastfeeding infant is dependent on breastmilk as the primary source of nutrition. Intake and growth may be at risk if the mother's milk supply is affected by health issues. Breastfeeding infant must be at the same risk level in the data system as the woman.

Category	Breastfeeding Infant
Risk level	Low
At risk if:	The mother of the breastfeeding infant has been certified on WIC with a nutrition risk
Not at risk if:	The mother of the breastfeeding infant is not at nutritional risk
How is risk assigned?	Certifier selected from risk list in the data system.
Additional documentation	No special requirements as the mother's risk is documented in her record in the data system.

Risk 801 - Homelessness

Risk description

A participant who lacks a fixed and regular nighttime residence or whose primary nighttime residence is:

- A supervised publicly or privately operated shelter designed to provide temporary living accommodations (including a welfare hotel or a shelter for victims of domestic violence)
- An institution that provides a temporary residence for individuals intended to be institutionalized
- A temporary accommodation of not more than 365 days in the residence of another individual
- A public or private place not designed for, or ordinarily used as, a regular sleeping accommodation for people

Reason for risk

Participants who are homeless may lack food storage and preparation facilities which puts them at nutrition risk.

Category	All
Risk level	Low
At risk if:	Participant lacks a fixed and regular nighttime residence
Not at risk if:	Participant has their own, regular nighttime residence
How is risk assigned?	Data system assigned based on information documented in the data system.
Additional documentation	No special requirements.

Risk 802 - Migrancy

Risk Description

A participant with a family member that works primarily in seasonal agriculture. The family member must have worked in seasonal agriculture within the last 24 months and must establish temporary housing during the work season.

Reason for Risk

Migrant families may lack food storage and preparation facilities which puts them at nutritional risk.

Category	All
Risk level	Low
At risk if:	Participant has a family member who has worked in seasonal agriculture within the last 2 years and lived in temporary housing
Not at risk if:	Participant does not have a family member who works in seasonal agriculture OR Participant works in seasonal agriculture but does not live in temporary housing
How is risk assigned?	Data system assigned based on information entered into the data system.
Additional documentation	No special requirements.

Risk 901 - Recipient of Abuse

Risk description

Any participant who has experienced physical, sexual, emotional, economic, or psychological maltreatment that may frighten, intimidate, terrorize, manipulate, hurt, humiliate, blame, injure, and/or wound the individual.

The experience of abuse may be self-reported by the individual, an individual's family member, or reported by a social worker, healthcare provider, or other appropriate personnel.

Reason for risk

Participants who have experienced abuse and neglect have a greater risk of health and nutrition problems. Types of abuse relevant to the WIC population include, but are not limited to, the following:

- **Domestic violence:** abuse committed by a current or former family or household member or intimate partner.
- **Intimate partner violence (IPV):** a form of domestic violence committed by a current or former intimate partner (i.e., spouse, boyfriend/girlfriend, dating partner, or ongoing sexual partner) that may include physical violence, sexual violence, stalking, and/or psychological aggression (including coercive tactics).
- **Child abuse and/or neglect:** any act or failure to act that results in harm to a child or puts a child at risk of harm. Child abuse may be physical (including shaken baby syndrome), sexual, or emotional abuse or neglect of an infant or child under the age of 18 by a parent, caretaker, or other person in a custodial role (such as a religious leader, coach, or teacher).

Category	All
Risk level	Low
At risk if:	Participant experienced abuse as self-reported by the participant or parent/guardian or documented by or reported by a social worker, health care professional or other appropriate personnel.
Not at risk if:	No abuse is reported.
How is risk assigned?	Data system assigned based on information entered into the data system.
Additional documentation	No special requirements.

Risk 902 - Woman or Infant /Child of Primary Caregiver with Limited Ability to Make Feeding Decisions and/or Prepare Food

Risk description

A woman that is assessed to have limited ability to make appropriate feeding decisions and/or prepare food.

An infant or child whose primary caregiver is assessed to have a limited ability to make appropriate feeding decisions and/or prepare food.

Examples include but are not limited to caregivers that are:

- Less than or equal to 17 years of age
- Diagnosed with an intellectual disability by a health care provider
- Diagnosed with mental illness (such as clinical depression) by a health care provider
- Has a physical disability which restricts ability to feed an infant/child or limits food preparation abilities
- Documented or self-reported misuse of alcohol, use of illegal drugs, use of marijuana or misuse of prescription drugs.

Reason for risk

A pregnant or postpartum woman's ability to choose and prepare suitable foods for herself is vital for her own health and wellbeing. An infant or child is at risk for inadequate or inappropriate intake without support and care from their caregiver.

Category	All

Risk level	High
At risk if:	Certifier determines that a woman or primary caregiver is unable to make appropriate feeding decisions or is unable to prepare food
Not at risk if:	Certifier determines that a woman or primary caregiver can make appropriate feeding decisions and prepare food
How is risk assigned?	Certifier selected from risk list in the data system.
Additional documentation	Document the specific type of problem in the data system. Referral to the RD is required.

Risk 903 – Foster Care

Risk Description

Entry into the foster care system during the previous 6 months or moving from one foster home to another foster home during the previous 6 months.

Risk cannot be used two times in a row if the participant remains in the same foster home. Risk can be used as the only risk code if a thorough assessment finds no other risks.

Reason for Risk

Participants in the foster care system are at greater risk of health and nutrition concerns due to the transient nature of their health care.

Category	All
Risk level	Low
At risk if:	Participant has entered foster care in the past 6 months or has changed foster homes in the past 6 months
Not at risk if:	Participant is not in foster care OR This risk was used last certification and the participant remains in the same foster home
How is risk assigned?	Certifier selected from risk list in the data system.
Additional documentation	No special requirements.

Risk 904 - Environmental Tobacco Smoke Exposure

Risk description

Environmental tobacco smoke (ETS) is defined as exposure to smoke from tobacco products or aerosols from nicotine delivery systems inside an enclosed area. ETS is also known as passive, secondhand or involuntary smoke.

Reason for risk

ETS is a known carcinogen. Women who are exposed to ETS are at increased risk for lung cancer, respiratory diseases and cardiovascular diseases. Prenatal or postnatal ETS exposure is related to numerous adverse health outcomes for infants and children that could last into adulthood.

Category	All
Risk level	Low
At risk if:	Participant is exposed to ETS inside an enclosed space such as a home, car, day care facility, restaurant, school or other public place. ETS includes smoke from tobacco products or aerosols from vaping including but not limited to: • Cigarettes • E-cigarettes • Vape pens • Pipes • Cigars • Hookahs

Not at risk if:	Participant is not exposed to ETS in an enclosed space
How is risk assigned?	Data system assigned based on information entered into the data system.
Additional documentation	No special requirements.

Job Aid Disease Names and Risks

Use this Job Aid to find the risk for a specific disease, health issue or condition.

NOTE

Some of these diseases or conditions require diagnosis by a health care provider before the risk can be assigned, and some may not automatically qualify for the risk. See the risk information sheets for complete information.

For this condition:	See this risk information sheet:
AIDS	Risk 352B – Infectious Diseases - Chronic
Anencephaly	Risk 348 – Central Nervous System Disorders and Risk 339 – History of a Birth with a Congenital Birth Defect
Autism	Risk 362 – Developmental, Sensory or Motor Delays Interfering with Eating
Anemia	Risk 341 – Nutrient Deficiency or Disease May apply: Risk 201A/B – Low Hemoglobin or Hematocrit
Anorexia Nervosa	Risk 358 – Eating Disorders
Anxiety	Risk 361 – Mental Illnesses
Arthritis	Risk 360 – Other Medical Conditions
Asthma	Risk 360 – Other Medical Conditions
Baby Bottle Tooth Decay	Risk 381 – Oral Health Conditions
Bipolar Disorders	Risk 361 – Mental Illnesses
Binge-Eating Disorder	Risk 358 – Eating Disorders
Bowel Resection	Risk 342 – Gastrointestinal Disorders
Brain Damage	Risk 362 – Developmental, Sensory or Motor Delays Interfering with Eating
Branched Chain Ketoaciduria	Risk 351 – Inborn Errors of Metabolism
Bronchial Asthma	Risk 360 – Other Medical Conditions

Job Aid Disease Names and Risks

Use this Job Aid to find the risk for a specific disease, health issue or condition.

Bronchiolitis	Risk 352A – Infectious Diseases - Acute
Bulimia Nervosa	Risk 358 – Eating Disorders
C-section	Risk 359 – Recent Major Surgery, Physical Trauma or Burns
Cancer	Risk 347 – Cancer

Job Aid | Disease Names and Risks

Use this Job Aid to find the risk for a specific disease, health issue or condition.

NOTE

Some of these diseases or conditions require diagnosis by a health care provider before the risk can be assigned, and some may not automatically qualify for the risk. See the risk information sheets for complete information.

For this condition:	See this risk information sheet:
Cardiorespiratory Diseases	Risk 360 – Other Medical Conditions
Celiac Disease	Risk 354 – Celiac Disease
Celiac Sprue	Risk 354 – Celiac Disease
Cerebral Palsy	Risk 348 – Central Nervous System Disorders
Cesarean	Risk 359 – Recent Major Surgery, Physical Trauma or Burns
Cholecystitis	Risk 342 – Gastrointestinal Disorders
Cholelithiasis	Risk 342 – Gastrointestinal Disorders
Cleft Lip or Palate	Risk 349 – Genetic and Congenital Disorders and Risk 339 – History of a Birth with a Congenital Birth Defect
Crohn's Disease	Risk 342 – Gastrointestinal Disorders
Cystic Fibrosis	Risk 360 – Other Medical Conditions
Delayed Feeding Skills	Risk 362 – Developmental, Sensory or Motor Delays Interfering with Eating
Depression	Risk 361 – Mental Illnesses
Developmental Disorders	Risk 362 – Developmental, Sensory or Motor Delays Interfering with Eating
Diabetes Mellitus (Type 1 or Type 2)	Risk 343 – Diabetes Mellitus
Down Syndrome	Risk 349 – Genetic and Congenital Disorders
Epilepsy	Risk 348 – Central Nervous System Disorders

Job Aid — Disease Names and Risks

Use this Job Aid to find the risk for a specific disease, health issue or condition.

NOTE

Some of these diseases or conditions require diagnosis by a health care provider before the risk can be assigned, and some may not automatically qualify for the risk. See the risk information sheets for complete information.

For this condition:	See this risk information sheet:
Failure to Thrive	Risk 134 – Failure to Thrive
Fetal Alcohol Syndrome	Risk 382 – Fetal Alcohol Spectrum Disorders
Fetal Growth Restriction	Risk 336 – Fetal Growth Restriction
Food Allergy	Risk 353 – Food Allergies
Galactosemia	Risk 351 – Inborn Errors of Metabolism
Gallbladder Disease	Risk 342 – Gastrointestinal Disorders
Gestational Diabetes	Risk 302 – Gestational Diabetes or Risk 303 – History of Gestational Diabetes
Gingivitis with Pregnancy	Risk 381 – Oral Health Conditions
Gluten Enteropathy	Risk 354 – Celiac Disease
Gluten Sensitivity	Risk 354 – Celiac Disease
Heart Disease	Risk 360 – Other Medical Conditions
Hepatitis	Risk 352A – Infectious Diseases - Acute
Hepatitis	Risk 352B – Infectious Diseases - Chronic
High Blood Pressure (Hypertension)	Risk 345 – Hypertension or Prehypertension
HIV	Risk 352B – Infectious Diseases - Chronic
Hyperemesis Gravidarum	Risk 301 – Hyperemesis Gravidarum
Hypertension	Risk 345 – Hypertension and Prehypertension

Job Aid | Disease Names and Risks

Use this Job Aid to find the risk for a specific disease, health issue or condition.

NOTE

Some of these diseases or conditions require diagnosis by a health care provider before the risk can be assigned, and some may not automatically qualify for the risk. See the risk information sheets for complete information.

For this condition:	See this risk information sheet:
Hyperthyroidism	Risk 344 – Thyroid Disorders
Hypoglycemia	Risk 356 – Hypoglycemia
Hypothyroidism	Risk 344 – Thyroid Disorders
Inflammatory Bowel Disease	Risk 342 – Gastrointestinal Disorders
Intrauterine Growth Restriction	Risk 336 – Fetal Growth Restriction
IUGR	Risk 336 – Fetal Growth Restriction
Juvenile Rheumatoid Arthritis (JRA)	Risk 360 – Other Medical Conditions
Kidney Disease	Risk 346 – Renal Disease
Lactose Intolerance	Risk 355 – Lactose Intolerance
Elevated Blood Lead Levels	Risk 211 – Elevated Blood Lead Levels
Liver Disease	Risk 342 – Gastrointestinal Disorders
Lupus Erythematosus	Risk 360 – Other Medical Conditions
Malabsorption Syndrome	Risk 342 – Gastrointestinal Disorders
Malnutrition	Risk 341 – Nutrient Deficiency or Disease
Maple Sugar Urine Disease (MSUD)	Risk 351 – Inborn Errors of Metabolism

Job Aid | Disease Names and Risks

Use this Job Aid to find the risk for a specific disease, health issue or condition.

NOTE

Some of these diseases or conditions require diagnosis by a health care provider before the risk can be assigned, and some may not automatically qualify for the risk. See the risk information sheets for complete information.

For this condition:	See this risk information sheet:
Metabolic Diseases	Risk 351 – Inborn Errors of Metabolism
Meningitis	Risk 352A – Infectious Diseases - Acute
Meningocele	Risk 348 – Central Nervous System Disorders and Risk 339 – History of a Birth with a Congenital Birth Defect
Mentally Delayed	Risk 902 – Woman or Infant/Child of Primary Caregiver with Limited Ability to Make Feeding Decisions or Prepare Food
Multiple Sclerosis	Risk 348 – Central Nervous System Disorders
Myelomeningocele	Risk 348 – Central Nervous System Disorders and Risk 339 – History of a Birth with a Congenital Birth Defect
Necrotizing Enterocolitis (NEC)	Risk 342 – Gastrointestinal Disorders
Neonatal Abstinence Syndrome (NAS)	Risk 383– Neonatal Abstinence Syndrome
Neural Tube Defects (NTD)	Risk 348 – Central Nervous System Disorders and Risk 339 – History of a Birth with a Congenital Birth Defect
Non-tropical sprue	Risk 354 – Celiac Disease
Occulta	Risk 348 – Central Nervous System Disorders and Risk 339 – History of a Birth with a Congenital Birth Defect
Parasites	Risk 352A – Infectious Diseases - Acute

Job Aid | Disease Names and Risks

Use this Job Aid to find the risk for a specific disease, health issue or condition.

NOTE

Some of these diseases or conditions require diagnosis by a health care provider before the risk can be assigned, and some may not automatically qualify for the risk. See the risk information sheets for complete information.

For this condition:	See this risk information sheet:
Pancreatitis	Risk 342 – Gastrointestinal Disorders
Parkinson's Disease	Risk 348 – Central Nervous System Disorders
Periodontal Disease	Risk 381 – Oral Health Conditions
Persistent Proteinuria	Risk 346 – Renal Disease
Personality Disorders	Risk 361 – Mental Illnesses
Phenylketonuria (PKU)	Risk 351 – Inborn Errors of Metabolism
PIH	Risk 345 – Hypertension and Prehypertension
Pinworm	Risk 352A – Infectious Diseases - Acute
PKU	Risk 351 – Inborn Errors of Metabolism
Pneumonia	Risk 352A – Infectious Diseases - Acute
Polycystic Kidney Disease	Risk 346 – Renal Disease
Polycystic Ovarian Syndrome (PCOS)	Risk 360 – Other Medical Conditions
Postpartum Depression	Risk 361 – Mental Illnesses
Pre-Diabetes	Risk 363 – Pre-Diabetes
Pregnancy Induced Hypertension	Risk 345 – Hypertension and Prehypertension
Pre-eclampsia	Risk 304 – History of Pre-eclampsia
Protein Energy Malnutrition	Risk 341 – Nutrient Deficiency or Disease

Job Aid | Disease Names and Risks

Use this Job Aid to find the risk for a specific disease, health issue or condition.

Proteinuria	Risk 346 – Renal Disease
Pyelonephritis	Risk 346 – Renal Disease
Renal Disease	Risk 346 – Renal Disease

Job Aid — Disease Names and Risks

Use this Job Aid to find the risk for a specific disease, health issue or condition.

NOTE

Some of these diseases or conditions require diagnosis by a health care provider before the risk can be assigned, and some may not automatically qualify for the risk. See the risk information sheets for complete information.

For this condition:	See this risk information sheet:
Rheumatoid Arthritis	Risk 360 – Other Medical Conditions
Rickets	Risk 341 – Nutrient Deficiency or Disease
Schizophrenia	Risk 361 – Mental Illnesses
Scurvy	Risk 341 – Nutrient Deficiency or Disease
Short Bowel Syndrome	Risk 342 – Gastrointestinal Disorders
Sickle Cell Anemia	Risk 349 – Genetic and Congenital Disorders
Small Bowel Enterocolitis	Risk 342 – Gastrointestinal Disorders
Small Bowel Syndrome	Risk 342 – Gastrointestinal Disorders
Small for Gestational Age	Risk 151 – Small for Gestational Age
Spina Bifida	Risk 348 – Central Nervous System Disorders and Risk 339 – History of a Birth with a Congenital Birth Defect
Tapeworm	Risk 352A – Infectious Diseases - Acute
Tapeworm	Risk 352B – Infectious Diseases - Chronic
Thalassemia	Risk 349 – Genetic and Congenital Disorders
Toxemia	Risk 345 – Hypertension and Prehypertension
Tubefeeding	Risk 362 – Developmental, Sensory or Motor Delays Interfering with Eating

Job Aid | Disease Names and Risks

Use this Job Aid to find the risk for a specific disease, health issue or condition.

NOTE

Some of these diseases or conditions require diagnosis by a health care provider before the risk can be assigned, and some may not automatically qualify for the risk. See the risk information sheets for complete information.

For this condition:	See this risk information sheet:
Tuberculosis (TB)	Risk 352A – Infectious Diseases - Acute
Tuberculosis (TB)	Risk 352B – Infectious Diseases - Chronic
Type 1 Diabetes	Risk 343 – Diabetes Mellitus
Type 2 Diabetes	Risk 343 – Diabetes Mellitus
Ulcerative Colitis	Risk 342 – Gastrointestinal Disorders
Ulcers	Risk 342 – Gastrointestinal Disorders
Vitamin A Excess	Risk 339 – History of a Birth with a Congenital Birth Defect
Zinc Deficiency	Risk 339 – History of a Birth with a Congenital Birth Defect

Job Aid | List of Risk Numbers and Names

This is a list of all risk numbers and names in their risk groups

100s	**Anthropometric**
101	Underweight Women
103	Underweight Infants and Children
111	Overweight Women
113	Overweight Children - 2 to 5 years
114	At Risk for Overweight Children - 2 to 5 years
115	High Weight for Length Under 2 Years of Age
121	Short Stature
131	Low Prenatal Weight Gain
133	High Maternal Weight Gain
134	Failure to Thrive
135	Infant Weight Loss Birth to 6 months
141A	Low Birth Weight Birth to 11 months
141B	Low Birth Weight 12 to 23 months
142	Preterm or Early Term Delivery
151	Small for Gestational Age
153	Large for Gestational Age Infants
200s	**Biochemical**
201A	Low Hemoglobin or Hematocrit
201B	Very Low Hemoglobin or Hematocrit
211	Elevated Blood Lead Levels
300s	**Clinical**
301	Hyperemesis Gravidarum
302	Gestational Diabetes
303	History of Gestational Diabetes
304	History of Preeclampsia
311	History of Preterm or Early Term Delivery
312	History of Low Birth Weight

Job Aid	List of Risk Numbers and Names

This is a list of all risk numbers and names in their risk groups

321	History of Fetal or Neonatal Loss
331	Pregnancy at a Young Age
332	Closely Spaced Pregnancy
334	Lack of or Inadequate Prenatal Care
335	Multiple Fetus Pregnancy
336	Fetal Growth Restriction
337	History of Birth of a Large for Gestational Age Infant
338	Pregnant Woman Currently Breastfeeding
339	History of a Birth with a Congenital Birth Defect
341	Nutrient Deficiency or Disease
342	Gastrointestinal Disorders
343	Diabetes Mellitus
344	Thyroid Disorders
345	Hypertension and Prehypertension
346	Renal Disease
347	Cancer
348	Central Nervous System Disorders
349	Genetic and Congenital Disorders
351	Inborn Errors of Metabolism
352A	Infectious Diseases - Acute
352B	Infectious Diseases - Chronic
353	Food Allergies
354	Celiac Disease
355	Lactose Intolerance
356	Hypoglycemia
357	Drug Nutrient Interactions
358	Eating Disorders
359	Recent Major Surgery, Physical Trauma or Burns

Job Aid | List of Risk Numbers and Names

This is a list of all risk numbers and names in their risk groups

360	Other Medical Conditions
361	Mental Illnesses
362	Developmental, Sensory or Motor Delays Interfering with Eating
363	Pre-Diabetes
371	Nicotine and Tobacco Use
372	Alcohol and Substance Use
381	Oral Health Conditions
382	Fetal Alcohol Spectrum Disorders
383	Neonatal Abstinence Syndrome
400s	**Dietary**
401	Presumed Dietary Eligibility for Women and Children 2 to 5 years
411.1	Use of Substitutes for Breastmilk or Formula
411.2	Inappropriate Use of Bottles or Cups
411.3	Early Introduction of Beverages or Solid Foods
411.4	Inappropriate Feeding Practices
411.5	Feeding Potentially Harmful Foods
411.6	Incorrect Dilution of Formula
411.7	Infrequent Breastfeeding
411.8	Feeding a Very Low Calorie or Nutrient Diet
411.9	Improper Handling of Expressed Breastmilk or Formula
411.10	Inappropriate Use of Dietary Supplements
411.11	Inadequate Fluoride or Vitamin D Supplementation
425.1	Inappropriate Beverages as Milk Source
425.2	Feeding Sweetened Beverages
425.3	Inappropriate Use of Bottles, Cups or Pacifiers
425.4	Inappropriate Feeding Practices
425.5	Feeding Potentially Harmful Foods
425.6	Feeding a Very Low Calorie or Nutrient Diet

Job Aid	List of Risk Numbers and Names

This is a list of all risk numbers and names in their risk groups

425.7	Inappropriate Use of Dietary Supplements
425.8	Inadequate Fluoride or Vitamin D Supplementation
425.9	Pica - Children
427.1	Inappropriate Use of Dietary Supplements
427.2	Eating a Very Low Calorie or Nutrient Diet
427.3	Pica - Women
427.4	Inadequate Iron, Iodine or Folic Acid Supplementation
427.5	Eating Potentially Harmful Foods
428	Presumed Dietary Eligibility for Infants and Children 4 to 23 months
500 to 900s	**Environmental**
502	Transfer of Certification
601	Breastfeeding Mother of Infant at Nutritional Risk
602	Breastfeeding Complications or Potential Complications for Women
603	Breastfeeding Complications or Potential Complications for Infants
701	Infant Up to 6 months of WIC Mom or WIC-Eligible Mom
702	Breastfeeding Infant of Woman at Nutritional Risk
801	Homelessness
802	Migrancy
901	Recipient of Abuse
902	Woman or Infant/Child of Primary Caregiver with Limited Ability to Make Feeding Decisions or Prepare Food
903	Foster Care
904	Environmental Tobacco Smoke Exposure

Job Aid

Risk Summary

This is a list of all approved nutrition risk criteria. All applicable risks must be selected for each participant at each certification. All assigned risks must be supported by documentation in the participant's record.

Key definitions

Risk: The USDA-assigned risk number and the Oregon WIC name for each risk

Category: The category of WIC participant to which the risk can be applied

Risk Level: Low, medium, or high indicates the seriousness of the risk

Additional Action & Documentation: Indicates when additional information must be documented and/or a high-risk referral needs to be made

Assigned By: How the risk gets assigned in the WIC data system

- **TWIST:** The WIC data system assigns the risk based on measurement data
- **CPA:** The user assigns risk based on information provided by the participant

Risk Summary				
Risk	**Category**	**Risk Level**	**Additional Action & Documentation**	**Assigned By**
101: Underweight women	Women	Medium	No	TWIST
103: Underweight infants and children	Infants, Children	High	Referral to the RD	TWIST
111: Overweight women	Women	Medium	No	TWIST
113: Overweight Children – 2 to 5 years	Children (2 to 5 years)	Medium	No	TWIST
114: At Risk for Overweight Children – 2 to 5 years	Children (2 to 5 years)	Medium	No	TWIST

Risk Summary				
Risk	**Category**	**Risk Level**	**Additional Action & Documentation**	**Assigned By**
115: High Weight for Length Under Age 2 Years	Infants, Children (under 24 months)	Medium	No	TWIST
121: Short Stature	Infants, Children	Low	No	TWIST
131: Low Prenatal Weight Gain	Pregnant Women	Medium	No	TWIST
133: High Maternal Weight Gain	Women	Medium	No	TWIST
134: Failure to Thrive	Infants, Children	High	Referral to the RD	CPA
135: Infant Weight Loss Birth to 6 months	Infants	High	Referral to the RD	TWIST
141A: Low Birth Weight	Infants 0-11 months	High	Referral to the RD	TWIST

Risk Summary				
Risk	**Category**	**Risk Level**	**Additional Action & Documentation**	**Assigned By**
141B: Low Birth Weight	Infants 12 months, Children (under 24 months)	Medium	No	TWIST
142: Preterm or Early Term Delivery	Infants, Children (under 24 months)	Medium	Document the weeks gestation	TWIST
151: Small for Gestational Age	Infants, Children (under 24 months)	Low	No	CPA
152: Low Head Circumference	Infants, Children (under 24 months)	Low	No	TWIST
153: Large for Gestational Age Infants	Infants	Low	No	TWIST

Risk Summary				
Risk	**Category**	**Risk Level**	**Additional Action & Documentation**	**Assigned By**
201A: Low Hemoglobin or Hematocrit	ALL	Medium	No	TWIST
201B: Low Hemoglobin or Hematocrit	ALL	High	Referral to the RD	TWIST
211: Elevated Blood Lead Levels	ALL	High	Referral to the RD	TWIST
301: Hyperemesis Gravidarum	Pregnant Women	High	Referral to the RD	CPA
302: Gestational Diabetes	Pregnant Women	High	Referral to the RD	CPA
303: History of Gestational Diabetes	Women	Low	No	CPA
304: History of Preeclampsia	Women	Low	No	CPA

Risk Summary				
Risk	**Category**	**Risk Level**	**Additional Action & Documentation**	**Assigned By**
311: History of Preterm or Early Term Delivery	Women	Low	No	CPA
312: History of Low Birth Weight	Women	Low	No	CPA
321: History of Fetal or Neonatal Loss	Women	Low	No	CPA
331: Pregnancy at a Young Age	Women	Medium	No	CPA
332: Closely Spaced Pregnancy	Women	Low	No	CPA
334: Lack of or Inadequate Prenatal Care	Pregnant Women	Low	Document the number of visit and weeks gestation	CPA

Risk Summary				
Risk	**Category**	**Risk Level**	**Additional Action & Documentation**	**Assigned By**
335: Multiple Fetus Pregnancy	Women	Medium	Document number of fetuses	CPA
336: Fetal Growth Restriction	Pregnant Women	Low	No	CPA
337: History of a Birth of a Large for Gestational Age Infant	Women	Low	No	CPA
338: Pregnant Woman Currently Breastfeeding	Pregnant Women	Low	No	CPA
339: History of a Birth with a Congenital Birth Defect	Women	Low	Document specific condition	CPA

Risk Summary				
Risk	**Category**	**Risk Level**	**Additional Action & Documentation**	**Assigned By**
341: Nutrient Deficiency or Disease	ALL	High	Referral to the RD	CPA
342: Gastrointestinal Disorders	ALL	High	Document specific condition. Referral to the RD	CPA
343: Diabetes Mellitus	ALL	High	Referral to the RD	CPA
344: Thyroid Disorders	ALL	Medium	Document specific condition.	CPA
345: Hypertension and Prehypertension	ALL	High	Referral to the RD	CPA
346: Renal Disease	ALL	High	Document specific condition. Referral to the RD	CPA

Risk Summary				
Risk	**Category**	**Risk Level**	**Additional Action & Documentation**	**Assigned By**
347: Cancer	ALL	High	Document specific condition. Referral to the RD	CPA
348: Central Nervous System Disorders	ALL	High	Document specific condition. Referral to the RD	CPA
349: Genetic and Congenital Disorders	ALL	High	Document specific condition. Referral to the RD	CPA
351: Inborn Errors of Metabolism	ALL	High	Document specific condition. Referral to the RD	CPA
352A: Infectious Diseases - Acute	ALL	High	Document specific condition. Referral to the RD	CPA

Risk Summary				
Risk	**Category**	**Risk Level**	**Additional Action & Documentation**	**Assigned By**
352B: Infectious Diseases – Chronic	ALL	High	Document specific condition. Referral to the RD	CPA
353: Food Allergies	ALL	Medium	Document specific allergy	CPA
354: Celiac Disease	ALL	High	Referral to the RD	CPA
355: Lactose Intolerance	ALL	Low	Document the symptoms caused by ingestion of dairy products	CPA
356: Hypoglycemia	ALL	Low	No	CPA
357: Drug Nutrient Interactions	ALL	High	Document specific drug. Referral to the RD	CPA

Risk Summary				
Risk	**Category**	**Risk Level**	**Additional Action & Documentation**	**Assigned By**
358: Eating Disorders	Women	High	Document specific condition. Referral to the RD	CPA
359: Recent Major Surgery, Physical Trauma, or Burns	ALL	Low	Document specific type of surgery, trauma, or burns	CPA
360: Other Medical Conditions	ALL	High	Document specific condition. Referral to the RD	CPA
361: Mental Illnesses	Women, Children	Medium	Document mental illness and treatment	CPA
362: Developmental, Sensory, or Motor Delays Interfering with Eating	ALL	High	Document specific type of condition. Referral to the RD	CPA

Risk Summary				
Risk	**Category**	**Risk Level**	**Additional Action & Documentation**	**Assigned By**
363: Pre-Diabetes	Postpartum Women	High	Referral to the RD	CPA
371: Nicotine and Tobacco Use	Women	Low	Document type of nicotine or tobacco use	TWIST
372: Alcohol and Substance Use	Women	Medium	Document specific type of alcohol or drug use	TWIST
381: Oral Health Conditions	ALL	Low	Document specific condition	CPA
382: Fetal Alcohol Spectrum Disorders	Infants, Children	High	Document type of disorder. Referral to the RD	CPA
383: Neonatal Abstinence Syndrome	Infants	High	Document type of drug exposure and symptoms. Referral to the RD	CPA

Risk Summary				
Risk	**Category**	**Risk Level**	**Additional Action & Documentation**	**Assigned By**
401: Presumed Dietary Eligibility for Women and Children 2 to 5 years	Women, Children (2 to 5 years)	Low	No; not to be assigned if any other risks have been assigned	CPA
411.1: Use of Substitutes for Breast Milk or Formula	Infants	Low	Document specific substitute offered	CPA
411.2: Inappropriate Use of Bottles or Cups	Infants	Low	Document specific inappropriate use	CPA
411.3: Early Introduction of Beverages or Solid Foods	Infants	Low	No	CPA
411.4: Inappropriate Feeding Practices	Infants	Low	Document specific inappropriate feeding practice	CPA

Risk Summary				
Risk	**Category**	**Risk Level**	**Additional Action & Documentation**	**Assigned By**
411.5: Feeding Potentially Harmful Foods	Infants	Low	Document specific food	CPA
411.6: Incorrect Dilution of Formula	Infants	Low	Document specific issue with formula dilution	CPA
411.7: Infrequent Breastfeeding	Exclusively Breastfed Infants	Medium	No	CPA
411.8: Feeding Very Low Calorie or Nutrient Diet	Infants	Low	Document specific diet	CPA
411.9: Improper Handling of Expressed Breast Milk or Formula	Infants	Low	Document specific issue	CPA

Risk Summary				
Risk	**Category**	**Risk Level**	**Additional Action & Documentation**	**Assigned By**
411.10: Inappropriate Use of Dietary Supplements	Infants	Low	Document specific inappropriate use	CPA
411.11: Inadequate Fluoride or Vitamin D Supplementation	Infants	Low	No	CPA
425.1: Inappropriate Beverages as Milk Source	Children	Low	Document specific beverage	CPA
425.2: Feeding Sweetened Beverages	Children	Low	Document specific sweetened beverage	CPA

Risk Summary				
Risk	**Category**	**Risk Level**	**Additional Action & Documentation**	**Assigned By**
425.3: Inappropriate Use of Bottles, Cups, or Pacifiers	Children	Low	Document specific inappropriate use	CPA
425.4: Inappropriate Feeding Practices	Children	Low	Document specific inappropriate feeding practice	CPA
425.5: Feeding Potentially Harmful Foods	Children	Low	Document specific food	CPA
425.6: Feeding Very Low Calorie or Nutrient Diet	Children	Low	Document specific diet	CPA
425.7: Inappropriate Use of Dietary Supplements	Children	Low	Document specific inappropriate use	CPA

Risk Summary				
Risk	**Category**	**Risk Level**	**Additional Action & Documentation**	**Assigned By**
425.8: Inadequate Fluoride or Vitamin D Supplementation	Children	Low	No	CPA
425.9: Pica – Child	Children	Low	Document specific non-food items eaten	CPA
427.1: Inappropriate Use of Dietary Supplements	Women	Low	Document specific inappropriate use	CPA
427.2: Eating Very Low Calorie or Nutrient Diet	Women	Low	Document specific diet	CPA
427.3: Pica – Women	Women	Low	Document specific non-food items eaten	CPA

Risk Summary				
Risk	**Category**	**Risk Level**	**Additional Action & Documentation**	**Assigned By**
427.4: Inadequate Iron, Iodine, or Folic Acid Supplementation	Women	Low	No	CPA
427.5: Eating Potentially Harmful Foods	Pregnant Women	Low	Document specific food	CPA
428: Presumed Dietary Eligibility for Infants and Children 4 to 23 months	Infants, Children (4-23 months)	Low	No; not to be assigned if any other risks have been assigned	CPA
502: Transfer of Certification	ALL	Low	No	CPA
601: Breastfeeding Mother of Infant at Nutritional Risk	Women	Low	No	CPA

Risk Summary				
Risk	**Category**	**Risk Level**	**Additional Action & Documentation**	**Assigned By**
602: Breastfeeding Complications or Potential Complications for Woman	Women	Medium	Document the specific type of breastfeeding problem	CPA
603: Breastfeeding Complications or Potential Complications for Infants	Infants	Medium	Document the specific type of breastfeeding complication	CPA
701: Infant Up to 6 months Old of WIC Mom or WIC Eligible Mom	Infants (under 6 months)	Low	If the mom was not on WIC during her pregnancy, document the risk(s) that would have qualified her for WIC	CPA

Risk Summary				
Risk	**Category**	**Risk Level**	**Additional Action & Documentation**	**Assigned By**
702: Breastfeeding Infant of Woman at Nutritional Risk	Breastfeeding Infants	Low	No	CPA
801: Homelessness	ALL	Low	No	CPA
802: Migrancy	ALL	Low	No	CPA
901: Recipient of Abuse	ALL	Low	No	CPA
902: Woman or Infant/Child of Primary Caregiver with Limited Ability to Make Feeding Decisions or Prepare Food	ALL	High	Document specific type of problem. Referral to the RD	CPA
903: Foster Care	ALL	Low	No	CPA

Risk Summary				
Risk	**Category**	**Risk Level**	**Additional Action & Documentation**	**Assigned By**
904: Environmental Tobacco Smoke Exposure	ALL	Low	No	CPA

More Information about Medical Conditions

A Reference for WIC Staff about Medical Conditions Encountered during WIC Certification

Compiled by Prasanna Krishnasamy, MD, MPH

Contents

Introduction

This reference has information about medical conditions that are encountered during WIC certification. The medical conditions are listed in alphabetical order and reference the WIC nutrition risk code that may apply to each condition.

The information is designed to give a basic understanding of the medical conditions. For more information, visit the websites listed in the resource section for each condition.

Participants with these medical conditions should regularly visit their primary health care provider. Many of these conditions require special diets which are prescribed by the health care provider and/or community dietitian.

Certifiers should use caution when counseling participants with these conditions and should not contradict the information provided by the participant's health care provider. Questions about diet for these participants should be referred to a health professional or WIC nutritionist.

The WIC nutritionist will evaluate the diets of all high-risk participants. While it is outside the scope of WIC practice to prescribe medical nutrition therapy, the WIC nutritionist will work with the participant to use WIC foods to help meet the goals of the diet already established by the health care provider and/or community dietitian.

NOTE

Check the individual risk information sheets or Policy 675 – Risk Criteria Codes and Descriptions to determine if a person qualifies for the risk.

AIDS

See Risk 352B – Infectious Diseases - Chronic
Also see HIV

Definition

- The term AIDS applies to the most advanced stages of HIV infection.
- Definition of AIDS includes all HIV-infected people who have fewer than 200 CD4+ T cells per cubic millimeter of blood. (Healthy adults usually have CD4+ T-cell counts of 1,000 or more.)
- In addition, the definition includes 26 clinical conditions that affect people with advanced HIV disease.
- Most of these conditions are opportunistic infections that generally do not affect healthy people.
- In people with AIDS, these infections are often severe and sometimes fatal because the immune system is so ravaged by HIV that the body cannot fight off certain bacteria, viruses, fungi, parasites, and other microbes.

Symptoms

Symptoms of opportunistic infections common in people with AIDS include:

- Coughing and shortness of breath
- Seizures and lack of coordination
- Difficult or painful swallowing
- Mental symptoms such as confusion and forgetfulness
- Severe and persistent diarrhea
- Fever
- Vision loss
- Nausea, abdominal cramps, and vomiting
- Weight loss and extreme fatigue
- Severe headaches
- Coma

Children with AIDS may get the same opportunistic infections, as do adults with the disease. In addition, they also have severe forms of the typically common childhood bacterial infections, such as conjunctivitis (pink eye), ear infections, and tonsillitis.

Counseling Notes

People with AIDS are often on special diets.

Resource Section

www.nih.gov (National Institutes of Health)

- Click on "Health Information"
- Look in "Health Topics" for "AIDS"

Anencephaly

See Neural Tube Defects.

Anemia

See Risk 201 – Low Hemoglobin or Hematocrit

Description

- Anemia is a lower than normal number of red blood cells (erythrocytes) in the blood, usually measured by a decrease in the amount of hemoglobin. Hemoglobin is the red pigment in red blood cells that transports oxygen.
- There are many types and potential causes of anemia.

Causes

The cause varies with the type of anemia. Potential causes include:

- Blood loss
- Diet low in iron-rich foods
- Other diseases
- Reactions to medications

- Problems with the bone marrow
- Iron deficiency anemia is most common in women who have heavy menstrual periods

Risk factors include:

- Heavy periods in women
- Pregnancy
- Heavy bleeding at birth
- Other diseases that cause anemia
- Low iron diet in infants and children

Symptoms

Possible symptoms include:

- Fatigue
- Chest pain
- Shortness of breath

Counseling Notes

- Iron-deficiency anemia can be treated by eating foods that are high in iron.
- Infants should be breastfed or drink an iron-fortified formula to prevent anemia (formula provided by WIC is iron-fortified).

Resource Section

www.medlineplus.gov (Medline Plus)

- Click on "Medical Encyclopedia"
- Look for "Iron Deficiency Anemia" or "Iron Deficiency Anemia – Children"

Arthritis

See Juvenile Rheumatoid Arthritis.

Asthma

See Risk 360 – Other Medical Conditions

Description

Asthma is a chronic lung condition. It is characterized by difficulty in breathing. People with asthma have extra-sensitive airways. The airways react by narrowing or closing when they become irritated. This makes it difficult for the air to move in and out.

Causes

This narrowing or closing of the airways is caused by:

- Airway inflammation (meaning that the airways in the lungs become red, swollen and narrow)
- Bronchoconstriction (meaning that the muscles that encircle the airways tighten or go into spasm)

Triggers of asthma include:

- Cold air
- Dust
- Strong fumes
- Exercise
- Inhaled irritants
- Emotional upsets
- Smoke
- Allergens
- Respiratory viral infections

Symptoms

The airway narrowing or obstruction can cause one or a combination of the following symptoms:

- Wheezing
- Coughing
- Shortness of breath
- Chest tightness

Counseling Notes

A number of individual medications exist for asthma, and many are used in combination with others. In general, the four types of treatments are:

- Long-term-control medications – These are used on a regular basis to control chronic symptoms and prevent attacks. Quick-relief medications – Used as needed for rapid, short-term relief of symptoms during an attack.
- Immunotherapy or allergy desensitization shots – These decrease the body's sensitivity to a particular allergen.
- Anti-IgE monoclonal antibodies – These are designed to prevent the immune system from reacting to allergens.

Controlling the environment can also help control asthma:

- Avoid cigarette smoke
- Exercise
- Use your air conditioner
- Decontaminate your décor
- Maintain optimal humidity
- Keep indoor air clean
- Reduce pet dander
- Clean regularly
- Limit use of contact lenses

Resource Section

www.nhlbi.nih.gov (National Heart, Lung and Blood Institute)

- Click on "Health Topics/Health Topics A-Z)"
- Look for "Asthma"

www.lungusa.org (American Lung Association)

- Click on "Lung Health and Diseases"
- Select "A"
- Look for "Asthma"

Bronchial Asthma

See Asthma.

Bronchiolitis

See Risk 352A – Infectious Diseases - Acute

Description

Bronchiolitis is an inflammation of the bronchioles (small passages in the lungs) usually caused by a viral infection. The disease usually affects children under the age of 2, with a peak age of 3 to 6 months. It is a common illness that can be severe.

Causes

- Bronchiolitis is seasonal and appears more frequently in the fall and winter months.
- Respiratory syncytial virus (RSV) is one common cause. Although RSV generally causes only mild symptoms in an adult, it can cause a severe illness in an infant.
- Other viruses that can cause bronchiolitis include parainfluenza, influenza, and adenovirus.
- Viruses that cause bronchiolitis are transmitted from person- to-person by direct contact with nasal secretions or by airborne droplets.
- Risk factors include:
    - Being less than 6 months old
    - Never being breastfed
    - Prematurity (born before 37 weeks gestation)
    - Exposure to cigarette smoke
    - Crowded living conditions

Symptoms

- Fever

- Cough
- Wheezing
- Rapid breathing
- Shortness of breath or difficulty breathing
- Bluish discoloration of skin due to lack of oxygen

Counseling Notes

- Sometimes, no treatment is necessary.
- Supportive therapy may include oxygen, humidified air, chest clapping (postural drainage to remove secretions), rest and clear fluids.
- In extremely ill children, antiviral medications are sometimes used. Antiviral treatment may decrease the severity and duration of the illness.
- Most cases of bronchiolitis are not readily preventable because the viruses that cause the disorder are common in the environment.
- Family members with an upper respiratory infection should be especially careful around infants. Wash hands frequently, especially before handling the child.

Resource Section

www.medlineplus.gov (Medline Plus)

- Click on "Medical Encyclopedia"
- Look for "Bronchiolitis"

Celiac Disease (Gluten Enteropathy)

See Risk 354 – Celiac Disease

Description

- Celiac disease is also known as celiac sprue, non-tropical sprue, and gluten-sensitive enteropathy.
- Celiac disease is a digestive disease that damages the small intestine and interferes with absorption of nutrients from food.

- People who have celiac disease cannot tolerate a protein called gluten, found in wheat, rye, and barley.
- Gluten is also found in food additives and also in products used every day, such as stamp and envelope adhesive, medicines, and vitamins.
- When people with celiac disease eat foods or use products containing gluten, their immune system responds by damaging the small intestine. As a result, a person becomes malnourished, regardless of the quantity of food eaten.

Cause

- Celiac disease is a genetic disease.
- Sometimes the disease is triggered or becomes active for the first time after surgery, pregnancy, childbirth, viral infection, or severe emotional stress.

Symptoms

- Celiac disease affects people differently.
- Symptoms may occur in the digestive system, or in other parts of the body.
- Symptoms of celiac disease may include one or more of the following:
    - Gas
    - Recurring abdominal bloating and pain
    - Chronic diarrhea
    - Pale, foul-smelling, or fatty stool
    - Weight loss / weight gain
    - Fatigue
    - Bone or joint pain
    - Tingling numbness in the legs (from nerve damage)
    - Muscle cramps
    - Seizures
    - Missed menstrual periods (often because of excessive weight loss)
    - Infertility, recurrent miscarriage
    - Delayed growth
    - Failure to thrive in infants
    - Pale sores inside the mouth
    - Tooth discoloration or loss of enamel
    - Itchy skin rash
    - A person with celiac disease may have no symptoms.

- Anemia, delayed growth, and weight loss are signs of malnutrition.
- The body is just not getting enough nutrients. Malnutrition is a serious problem for children because they need adequate nutrition to develop properly.

Counseling Notes

- The only treatment for celiac disease is to follow a gluten-free diet. The diet must be followed forever.
- For most people, following a gluten-free diet will stop symptoms, heal existing intestinal damage, and prevent further damage.
- Eating any gluten, no matter how small an amount, can damage the small intestine.

Resource Section

https://www.niddk.nih.gov/ **(National Institute of Diabetes & Digestive & Kidney Diseases)**

- Click on "Health Information/Digestive"
- Click on "Digestive Diseases"
- Look for "Celiac Disease"

Celiac Sprue

See Celiac Disease.

Cerebral Palsy

See Risk 348 – Central Nervous System Disorders

Description

- Cerebral palsy is a term used to describe a group of chronic disorders impairing control of movement.
- Cerebral palsy usually appears in the first few years of life and generally does not worsen over time.
- People with cerebral palsy have difficulty controlling movement and posture.

Causes

- It is caused by damage to the brain.
- Cerebral palsy may be congenital or acquired after birth.
- Several of the causes of cerebral palsy are preventable or treatable:
    - Head injury
    - Jaundice
    - Rh incompatibility
    - Rubella (German measles)
    - Extreme prematurity

Symptoms

- The symptoms differ from person to person and may change over time.
- Symptoms of cerebral palsy include:
    - Difficulties with fine motor tasks (such as writing or using scissors)
    - Difficulty maintaining balance or walking
    - Involuntary movements
    - Infants with cerebral palsy are frequently slow to reach developmental milestones such as learning to roll over, sit, crawl, smile, or walk.

Counseling Notes

- Some people with cerebral palsy are also affected by other medical disorders, including seizures or mental impairment, but cerebral palsy does not always cause profound handicap.

- Doctors diagnose cerebral palsy by testing motor skills and reflexes, looking into medical history, and employing a variety of specialized tests.
- At this time, cerebral palsy cannot be cured, but many patients can enjoy near-normal lives if their neurological problems are properly managed.

Resource Section

www.ninds.nih.gov (National Institute of Neurological Disorders and Stroke)

- Look in "Disorder Index" for "Cerebral Palsy"

Cholecystitis

See Gallbladder Disease.

Cholelithiasis

See Gallbladder Disease.

Cleft Lip or Palate

See Risk 349 – Genetic and Congenital Disorders

Description

Normally the tissues that form the palate and the upper lip come together in the middle and join. If the baby has a cleft, this fusion failed to happen during pregnancy.

Causes

- The cause is usually unknown.
- In some families, clefts appear in several family members, so the cause may be genetic.
- Smoking—Women who smoke during pregnancy are more likely to have a baby with an orofacial cleft than women who do not smoke.
- Diabetes—Women with diabetes diagnosed before pregnancy have an increased risk of having a child with a cleft lip with or without cleft palate, compared to women who did not have diabetes.
- Use of certain medicines—Women who used certain medicines to treat epilepsy, such as topiramate or valproic acid, during the first trimester (the first 3 months) of pregnancy have an increased risk of having a baby with cleft lip with or without cleft palate, compared to women who didn't take these medicines

Counseling Notes

- Cleft lip and cleft palate are not life threatening.
- The cleft can be corrected by bringing together the tissues that should have fused before birth. Surgical repair of the cleft is done by choice. It can be done when the child is the right age and size and is in good general health to tolerate surgery.
- Surgery is often done after the baby is 10 weeks old and weighs 10 pounds.
- Before the cleft is corrected with surgery, an artificial palate may be used to fill the gap in the palate so that the baby can nurse and make the sounds that are the beginnings of speech.
- Infants with only a cleft lip can usually breastfeed.
- Infants with only a cleft palate can usually breastfeed if the gap in the palate is narrow.
- Infants with both cleft lip and cleft palate may not be able to nurse at the breast, but breast milk can be fed with a soft plastic bottle and a crosscut nipple. This special nipple allows the milk to flow at a rate comfortable for the baby to swallow.
- Some potential risks can included feeding difficulties, hearing loss, ear infections, speech / language delays and dental problems.

Resource Section

https://www.cdc.gov/ncbddd/birthdefects/index.html **(Center for Disease Control and Prevention)**

- Click on "Specific Birth Defects"
- Look for "Cleft Lip and Palate"

Crohn's Disease

See Inflammatory Bowel Disease.

Cystic Fibrosis

See Risk 360 – Other Medical Conditions

Description

Cystic fibrosis (CF) is a disease that affects the mucus and sweat glands. Normal mucus is watery and keeps the linings of certain organs moist and prevents them from drying out or getting infected.

In CF, an abnormal gene causes mucus to become thick and sticky. The mucus builds up and can block:

- The lungs and airways
- Tubes or ducts in the pancreas, preventing digestive enzymes from reaching the intestines

The symptoms and severity of CF vary from person to person. Some people with CF have serious lung and digestive problems.

Other people have a more mild disease that doesn't show up until they are adolescents or young adults.

Symptoms

Most of the symptoms of cystic fibrosis (CF) are caused by the thick, sticky mucus. The most common symptoms include:

- Frequent coughing that brings up thick sputum
- Frequent bouts of bronchitis and pneumonia. They can lead to inflammation and permanent lung damage.
- Salty-tasting skin
- Dehydration (lack of enough water in the body)
- Ongoing diarrhea or bulky, foul-smelling, and greasy stools
- Huge appetite but poor weight gain and growth
- Stomach pain and discomfort caused by too much gas in intestines

Counseling Notes

- There still is no cure for cystic fibrosis, but treatments have improved greatly in recent years.
- The goals of CF treatment are to:
    - Prevent and control infections in the lungs
    - Loosen and remove the thick, sticky mucus from the lungs
    - Prevent blockages in the intestines
    - Provide adequate nutrition
- The main treatments for lung problems in people with CF are:
    - Antibiotics for infections of the airways
    - Chest physical therapy (clapping the lungs)
    - Exercise
    - Other medications
    - Nutritional therapy

Resource Section

www.nhlbi.nih.gov (National Heart, Lung and Blood Institute)

- Click on "Health Topics/Health Topics A-Z)"
- Look for "Cystic Fibrosis"

Diabetes Mellitus

See Risk 343 – Diabetes Mellitus
Also see Gestational Diabetes (Risks 343 and 303).

Description

Diabetes is a life-long disease marked by high levels of sugar (glucose) in the blood. The usual causes are too little insulin (a hormone produced by the pancreas to regulate blood sugar), resistance to insulin or both.

Type 1 Diabetes: Usually diagnosed in childhood. The body makes little or no insulin, and daily injections of insulin are required.

Without proper daily management, medical emergencies can arise.

Type 2 Diabetes: Most common type. It usually occurs in adulthood. The pancreas does not make enough insulin to keep blood glucose levels normal, often because the body does not respond well to the insulin.

Causes

Risk Factors:

- A parent, brother, or sister with diabetes
- Obesity
- Age greater than 45 years
- Some ethnic groups (particularly African-Americans and Hispanic Americans)
- Gestational diabetes or delivering a baby weighing more than 9 pounds
- High blood levels of triglycerides (a type of fat molecule)
- High blood cholesterol level

Symptoms

Symptoms of **Type 1 Diabetes**:

- Increased thirst
- Increased urination
- Weight loss in spite of increased appetite
- Fatigue
- Nausea
- Vomiting

Symptoms of **Type 2 Diabetes**:

(symptoms may come on slowly and not be noticed)

- Increased thirst
- Increased urination
- Increased appetite
- Fatigue
- Blurred vision
- Slow-healing infections

Counseling Notes

- There is no cure for diabetes.
- The immediate goals of treatment are to keep the blood sugar within normal range.
- People with **Type 1 Diabetes** often follow a specific diet plan – eating at about the same times each day and trying to be consistent with the types of food they choose. This helps to prevent blood sugars from becoming extremely high or low. Daily insulin injections are required.
- People with **Type 2 Diabetes** should follow a well-balanced and low-fat diet. Weight management is important to achieving control of diabetes. Some people with **Type 2 Diabetes** find they no longer need medication if they lose weight and increase activity because when their ideal weight is reached, their own insulin and a careful diet can control their blood glucose levels. Medications to treat diabetes include insulin and glucose- lowering pills, called oral hypoglycemic agents.

Resource Section

www.niddk.nih.gov (National Institute of Diabetes & Digestive & Kidney Diseases)

- Click on "Health Topics/Diabetes"

Down syndrome

See Risk 349 – Genetic and Congenital Disorders

Description

Down syndrome is a chromosomal disorder caused by an error that results in the presence of an additional chromosome (trisomy 21). Down syndrome can be diagnosed in the fetus during pregnancy or in the infant following birth.

Causes

- Genetic

Symptoms

Health problems in a child with Down syndrome may include:

- Intellectual Disability
- Heart defects
- Intestinal malformations
- Low muscle tone
- Crossed eyes, visual problems, and cataracts (haziness in eyes)
- Hearing loss
- Increased risk of colds and ear infections, as well as lung infections
- Increased risk of thyroid problems and leukemia
- Increased risk of celiac disease
- Crossed eyes, visual problems, and cataracts (haziness in eyes)

Counseling Notes

- There is no cure for Down syndrome, nor is there any prevention.
- There is no specific nutrition therapy for Down syndrome.
- Children with Down syndrome usually can do most things that any young child can do, such as walking, talking, dressing and being toilet-trained. They generally start learning these things later than other children.
- Babies with Down syndrome benefit greatly from breastfeeding. Mothers of breastfeeding babies with Down syndrome may need additional support.
- At risk for delayed feeding skills due to sensory processing disorders, poor oral motor skills and low muscle tone.
- Infants with Down syndrome may be enrolled in Early Intervention services

- Preschool children with Down syndrome may be enrolled in Early Childhood Education Services through county developmental disability services.
- Infants and children with Down syndrome are eligible for in-home supports through the Office of Developmental Disability Services.
- All individuals with Down syndrome can develop Celiac disease.
- Resource Section

www.medlineplus.gov (Medline Plus)

- Click on "Medical Encyclopedia"
- Look for "Down Syndrome"

www.cdc.gov (Centers for Disease Control)

- Facts about Down Syndrome
- Growth Charts for Children with Down syndrome

www.NDSCCenter.org (National Down Syndrome Congress)

- Healthcare Information for Families of Children with Down Syndrome

www.DSMIG-USA.org (Down Syndrome Medical Interest Group)

- Health Supervision for Children and Adolescents with Down Syndrome

Epilepsy

See Risk 348 – Central Nervous System Disorders

Description

Epilepsy is a neurological condition that makes people susceptible to seizures.
A seizure is a brief electrical disturbance in the brain that causes a change in sensation, awareness, or behavior.
Types of seizures include:

- A momentary disruption of the senses
- Short periods of unconsciousness

- Staring spells
- Convulsions

- Doctors treat epilepsy primarily with seizure-preventing medicines. Although seizure medications are not a cure, they control seizures in the majority of people with epilepsy.

Causes

In most cases, the cause of epilepsy is unknown. In some cases, it may be caused by genetics, brain tumor, or brain injury.

Epilepsy and Pregnancy

More than 90% of women with epilepsy have normal, healthy babies. But there are some risks:

- Higher risk of stillbirth.
- Higher risk for bleeding, early birth and delays in development and growth.
- Possibility of birth defects due to the anti-seizure medication. However, the risks of not taking medication are much higher for the baby – increased seizures can cause the fetus physical injury, developmental delay and even death.
- During pregnancy, the body processes anti-seizure medications differently. This can lead to medicine levels that are too high (which can cause side effects) or too low (which can mean more seizures).

Counseling Notes

Vitamin supplements and folic acid (a B vitamin) are recommended before and during pregnancy to help prevent certain kinds of birth defects.

Resource Section

www.epilepsyfoundation.org (Epilepsy Foundation)

- Click on "Learn/About Epilepsy"

www.ninds.nih.gov (National Institute of Neurological Disorders and Stroke)

- Look in "Search Disorders" for "Epilepsy"

Failure to Thrive (FTT)

See Risk 134 – Failure to Thrive (FTT)

Description

Failure to thrive (FTT) or undernutrition is a description applied to children whose current weight or weight gain is significantly below that of other children of similar age and sex.

Failure to thrive in infants and children is usually noticed when they seem to be dramatically smaller or shorter than other children the same age. However, there is a wide variation in normal growth and development. In general, the gain in weight and height over time may be a better indicator of a problem than the actual measurements.

Causes

There are multiple medical causes of failure to thrive:

- Defects involving the chromosomes – Down's and Turner's Syndrome.
- Defects in major organ systems.
- Problems with the endocrine system, such as thyroid hormone deficiency and growth hormone deficiency.
- Damage to the brain, which may cause feeding difficulties in an infant.
- Abnormalities in the heart and lung, which can decrease the delivery of oxygen and nutrients to the body.
- Anemia
- Abnormalities in the stomach and bowels, which may result in decreased digestion and absorption.
- Psychological and social factors leading to emotional deprivation as a result of parental withdrawal, rejection, or hostility.
- Economic factors can also affect nutrition, living conditions, and parental attitudes.
- Environmental factors may include exposure to infections or toxins.
- Many times the cause cannot be determined.

Symptoms

- Height, weight, and head circumference in an infant or young child do not progress normally according to standard growth charts. For example, weight less than the 3rd percentile, or weight 20% below the ideal weight for height, or a slow down of previously normal growth.
- Physical skills such as rolling over, sitting, standing and walking are slow to develop.
- Mental and social skills are delayed.

Counseling Notes

- The treatment depends on the cause of the delayed growth and development. Involvement of multiple health and social service professionals may be necessary.
- Delayed growth due to nutritional factors can be resolved by providing a well-balanced diet.
- If psychosocial factors are involved, treatment should include improving the family and living conditions.
- If the duration of delayed growth has been short, and the cause is found out and can be corrected, normal growth and development will follow. If it is prolonged, the problem may be long lasting, and normal growth and development may not occur.
- The best means of prevention is by early detection at routine well-baby examinations and regular follow-up with school age and adolescent children.Caution is to be used when counseling for 'catch-up' growth for infants born prematurely. Rapid, excess growth can place a burden on under developed organs unable to handle the excess calorie load.

Resource Section

www.medlineplus.gov (Medline Plus)

- Click on "Medical Encyclopedia"
- Look for "Failure to Thrive"

Fetal Alcohol Syndrome (FAS)

See Risk 382 – Fetal Alcohol Spectrum Disorders

Description

If the mother drinks alcohol while pregnant, the baby has a drink as well. This puts the baby at risk of a serious condition called fetal alcohol syndrome (FAS), which is a group of birth defects. These defects are irreversible. The syndrome includes physical, mental and behavioral problems.

Causes

Doctors are not sure how much alcohol places the baby at risk. However, the more alcohol the mother drinks, the greater the chance of problems – possibly even before the mother knows that she is pregnant.

Symptoms

Fetal alcohol syndrome is not a single birth defect. It is a cluster or pattern of related problems. The severity of signs and symptoms varies, with some children experiencing them to a far greater extent than others.

Problems associated with FAS include:

- Distinctive facial features, including small eyelid openings, a sunken nasal bridge, an exceptionally thin upper lip, a short, upturned nose and a smooth skin surface between the nose and upper lip
- Small teeth
- Heart defects
- Defects of joints, limbs and fingers
- Slow physical growth before and after birth
- Vision difficulties including nearsightedness
- Small head circumference and brain size
- Intellectual and developmental disability
- Developmental delays
- Abnormal behavior such as a short attention span, hyperactivity, poor impulse control, extreme nervousness and anxiety

Counseling Notes

Women who are pregnant of who are planning to become pregnant should be advised to avoid alcohol.

Resource Section

www.medlineplus.gov (Medline Plus)

- Click on "Medical Encyclopedia"
- Look for "Fetal Alcohol Syndrome"

Fetal Growth Restriction

See Risk 336 – Fetal Growth Restriction

Description

Fetal growth restriction is often called Intrauterine Growth Restriction (IUGR). Babies with fetal growth restriction are smaller than normal during pregnancy. These babies usually have a low weight at birth.

Causes

Fetal growth restriction has various causes.

- The most common cause is a problem with the placenta (the tissue that carries food and blood to the baby).
- Birth defects and genetic disorders can also cause fetal growth restriction.
- There is higher risk for fetal growth restriction in pregnant women:
  - with an infection
  - with high blood pressure, preeclampsia or eclampsia
  - who smoke
  - who drink alcohol or abuse drugs
  - who have multiple pregnancies

Symptoms

During the prenatal exam, the health care provider notices that the baby is not growing inside the uterus at the normal rate. In some cases, fetal growth restriction may not be noticed until after delivery.

Counseling Notes

- During pregnancy, the health care provider will do tests to find out if the baby is growing normally.
- The main test for checking a baby's growth in the uterus is an ultrasound. During the ultrasound exam, the size of the baby's head, abdomen and legs will be measured. These measurements will tell if the baby is growing normally. The amount of amniotic fluid in the uterus is also measured.
- Some babies with fetal growth restriction are weak. The stress of labor and delivery may be too much for a weak baby. If the baby has problems during labor, a c-section delivery may be safer.
- Fetal growth restriction with one pregnancy does not usually mean that future pregnancies will be affected by fetal growth restriction.
- Women can lower their chances of having another baby with fetal growth restriction by making sure they are doing everything possible to lower their risk factors; for example, stop smoking, drinking alcohol or using drugs, and working to control high blood pressure.
- Good control of illnesses before and during pregnancy lowers the risk of having another baby with fetal growth restriction.
- Babies who are small at birth need to stay in the hospital until they can breathe and feed normally. After the baby is born, the doctor will check the baby's weight to make sure the baby is growing. Generally, babies stay in the hospital until they weigh about 5 pounds and can breathe and feed normally.
- Small babies usually catch up in size and have a normal height by about 2 years of age.

Resource Section

www.medlineplus.gov (Medline Plus)

- Click on "Medical Encyclopedia"
- Look for "Intrauterine Growth Restriction"

Food Allergies

See Risk 353 – Food Allergies

Description

True food allergies are not nearly as common as one might think. About 3 percent of adults and 6-8 percent of children under age three years actually have a true food allergy – an adverse reaction to a food that is triggered by the immune system. A true food allergy – also called hypersensitivity can cause serious problems and even death. With a food allergy, even a tiny amount of food may trigger an allergic reaction.

Far more people have food intolerance, an unpleasant reaction to food that does not involve the immune system. Food intolerances may involve many of the same signs and symptoms as food allergies do – such as nausea, vomiting, cramping and diarrhea – hence, people often confuse the two. However, with food intolerance, small amounts of food can be tolerated.

Food allergies are most common in children, especially toddlers and infants. As the children grow older, their digestive system matures, and their body is less likely to absorb food or food components that trigger allergies. Fortunately, children typically outgrow allergies to milk, soy, wheat and eggs. Severe allergies and allergies to nuts and shellfish are more likely to be lifelong.

Causes

In a true food allergy, the immune system mistakenly identifies a specific food or component of food as a harmful substance.

The great majority of food allergies are triggered by certain proteins in:

- Eggs
- Peanuts
- Fish
- Shellfish, such as shrimp, lobster and crab
- Tree nuts, such as walnuts and pecans

In children, food allergies are also commonly triggered by proteins in these foods:

- Cow's milk
- Wheat
- Soybeans

Symptoms

The most common signs and symptoms of a true food allergy include:

- Hives
- Itching or eczema
- Swelling of the lips, face, tongue and throat, or other parts of the body
- Wheezing, nasal congestion or trouble breathing
- Abdominal pain, diarrhea, nausea or vomiting
- Dizziness, lightheadedness or fainting

In a severe allergic reaction to food – called anaphylaxis – the person may experience the following life-threatening signs and symptoms:

- Constriction of airways, including a swollen throat or a lump in your throat, that makes it difficult to breathe
- Shock, with a severe drop in blood pressure
- Rapid pulse
- Dizziness, lightheadedness or loss of consciousness

Counseling Notes

The only way to avoid an allergic reaction is to avoid foods that cause signs and symptoms.

In severe food allergies, the person may need an emergency injection of adrenaline (epinephrine) when the allergic reaction to a food is happening. Some people with allergies carry injectable epinephrine with them at all times.

For less severe allergies, the doctor may prescribe medications (antihistamines), which can be taken after exposure to an allergen to control the reaction and help relieve discomfort.

Resource Section

www.mayoclinic.com (Mayo Clinic)

- Under "Find Diseases & Conditions" look for "Food Allergy"

Gallbladder Disease

See Risk 342 – Gastrointestinal Disorders

Description

The gallbladder is a sac located under the liver. It stores and concentrates bile produced in the liver, which is necessary for the digestion of fats. Normally, bile is released from the gallbladder into the intestine in response to food (especially fats). Conditions that slow or block the flow of bile out of the gallbladder result in gallbladder disease. Gallbladder disease includes:

- Cholecystitis (inflammation of the gallbladder)
    - Acute cholecystitis is a sudden inflammation of the gallbladder that can cause severe abdominal pain. Stones in the gallbladder are the most common cause. Although it may clear up on its own, surgery to remove the gallbladder is usually needed. After surgery, the outlook is usually very good. Other than surgery, avoiding fatty foods may decrease or prevent the attacks.
    - Chronic cholecystitis is long-standing inflammation of the gallbladder. It is caused by repeated mild attacks of acute cholecystitis. The gallbladder shrinks and loses the ability to perform its function. Surgery is the usual treatment.
- Cholelithiasis (gallstones)
    - Gallstones may be as small as a grain of sand, or they may become as large as an inch in diameter.
    - Gallstones often have no symptoms. Symptoms usually start after a stone of sufficient size blocks the outflow of bile. Surgery is done only if you have symptoms.

Causes

Women who have an increased risk of gallstones include:

- Native Americans
- Mexican Americans
- overweight women
- women who fast or lose a lot of weight quickly

- pregnant women
- women who use birth control pills

Symptoms

Symptoms include one or more of the following:

- abdominal fullness or gas
- abdominal pain (usually occurring after fatty meals and worsening with deep breath)
- fever
- nausea and vomiting
- heartburn
- chest pain under the breastbone (not common)

Counseling Notes

- Weight reduction may decrease the symptoms.
- Reducing intake of fatty foods may decrease the symptoms.

Resource Section

www.medlineplus.gov **(Medline Plus)**

- Click on "Medical Encyclopedia"
- Look for "Gallstones"

Gestational Diabetes

See Risk 302 – Gestational Diabetes
See Risk 303 – History of Gestational Diabetes

Also see Diabetes Mellitus (Risk 343).

Description

Gestational diabetes is a type of diabetes (high blood sugar) that begins during pregnancy. Gestational diabetes usually goes away after delivery, but the woman is at greater risk for developing diabetes at a later time.

Babies born to women with gestational diabetes may be large (macrosomia). This may cause birth complications. The baby may also have hypoglycemia (dangerously low blood glucose levels blood) after delivery.

Causes

Women with the following risks are more likely to get gestational diabetes:

- Gestational diabetes in past pregnancies.
- Overweight

Diagnosed with prediabetes

- History of Polycystic Ovarian Syndrome (PCOS).
- Hirsutism (excessive body and facial hair).
- Acanthosis nigricans (darkened patches of skin on the neck, groin and under the arms).
- Being a member of a population considered to be at high risk for diabetes, including women of Aboriginal, Hispanic, South Asian, Asian or African descent.

Symptoms

Often there are no symptoms of gestational diabetes. Good prenatal care includes screening women for gestational diabetes at 24–28 weeks of pregnancy. The "glucose tolerance test" will show if a woman has gestational diabetes. Prenatal care also includes testing the urine for "ketones," an indication of diabetes.

Counseling Notes

The goal of treatment is to keep the blood glucose level within the normal range to help the baby develop normally. The woman may need to test her blood sugar at home to monitor how she is doing. She will also need regular follow-up care with her health care provider, and may need a referral to a dietitian.

In many cases, blood sugar can be kept in the normal range by eating a healthy diet and exercising regularly.

Lifestyle changes can prevent or reverse gestational diabetes. These changes include eating a healthy diet and regular exercise.

To reduce the risk of developing diabetes in the future, women should be encouraged to:

- Breastfeed – breastfeeding has been shown to reduce the risk for subsequent diabetes in the baby.
- Follow a healthy lifestyle.
- Be screened regularly for the development of diabetes.
- Consult her physician before her next pregnancy.

Resource Section

www.niddk.nih.gov (National Institute of Diabetes & Digestive and Kidney Diseases)

- Click on "Health Topics/Diabetes"
- Look for "Gestational Diabetes"

Gluten Enteropathy

See Celiac Disease.

Hepatitis

See Risk 352B – Infectious Diseases - Chronic

Also see Liver Disease.

Description

There are several types of hepatitis. The most common are:

- Hepatitis A
- Hepatitis B
- Hepatitis C

Causes

Hepatitis A is a virus that is most commonly spread through eating food prepared by someone who has Hepatitis A. It is more common in children who attend day care. Most infected people do not even know they have been exposed to the virus.

Hepatitis B can be spread by exposure to infected blood, through sexual relations, and from mother to baby. Symptoms of Hepatitis B may be absent, mild and flu-like, or acute. Most people will get better without any intervention, but some people are chronically infected and often have chronic damage to the liver.

Hepatitis C is passed the same way as Hepatitis B, exposure to infected blood. Hepatitis C is less common than B as a cause of acute hepatitis, but the majority of the people who contract it become chronically infected, able to spread the infection to others, and usually have chronic damage to the liver.

Symptoms

Some symptoms include:

- dark colored urine
- light colored stools
- yellowish skin and eyes
- fatigue
- diarrhea
- stomach pain

Counseling Notes

People with Hepatitis A or Hepatitis C may be on a special diet.

Resource Section

www.niddk.nih.gov **(National Institute of Diabetes & Digestive & Kidney Diseases)**

- Click on "Health Topics/Liver Disease"
- Look for "Hepatitis"

HIV

See Risk 352B – Infectious Diseases - Chronic
Also see AIDS.

Description

Advanced infection of HIV (human immunodeficiency virus) causes AIDS.
By killing or damaging cells of the body's immune system, HIV progressively destroys the body's ability to fight infections and certain cancers.
People diagnosed with AIDS may get life-threatening diseases called opportunistic infections, which are caused by viruses or bacteria that usually do not make healthy people sick.

Causes

- Having unprotected sex with an infected partner spreads HIV most commonly.
- HIV also is spread through contact with infected blood. However, because of blood screening and heat treatment, the risk of getting HIV from such transfusions is extremely small.
- HIV is frequently spread among injection drug users by the sharing of needles or syringes contaminated with very small quantities of blood from someone infected with the virus.
- Women can transmit HIV to their babies during pregnancy or birth. Approximately one-quarter to one-third of all untreated pregnant women infected with HIV will pass the infection to their babies. If the mother takes certain drugs during she can significantly reduce the chances that her baby will get infected with HIV.
- HIV also can be spread to babies through the breast milk of mothers infected with the virus.
- Although researchers have found HIV in the saliva of infected people, there is no evidence that the virus is spread by contact with saliva.
- Scientists have found no evidence that HIV is spread through sweat, tears, urine, or feces.

- Studies of families of HIV-infected people have shown clearly that HIV is not spread through casual contact such as the sharing of food utensils, towels and bedding, swimming pools, telephones, or toilet seats.
- Biting insects such as mosquitoes or bedbugs do not spread HIV.

Counseling Notes

HIV can be diagnosed with a simple blood test.
People infected with HIV may take medications that require a special diet. Without treatment, a child's immune system can weaken over time and opportunistic infections can develop.

Resource Section

www.medlineplus.gov (Medline Plus)

- Click on "Medical Encyclopedia"
- Look for "HIV/AIDS in pregnant women and infants"

Hyperemesis Gravidarum

See Risk 301 – Hyperemesis Gravidarum

Description

Hyperemesis gravidarum is extreme, persistent nausea and vomiting during pregnancy that may lead to dehydration (not enough water in the body).

Nearly all women experience some degree of nausea and vomiting during pregnancy, particularly during the first trimester, often referred to as morning sickness. Hyperemesis gravidarium is less common and more severe. Too much vomiting can interfere with the weight gain needed for a healthy pregnancy and cause dehydration, which can be harmful to both mother and child.

Causes

The cause of hyperemesis gravidarum is unknown.

Symptoms

- Severe, persistent nausea and vomiting
- Signs of dehydration: dark urine, dry skin, weakness
- Lightheadedness
- Fainting

Counseling Notes

This risk is used for women who have severe nausea and vomiting, when medical attention is required. Medication or hospitalization may be needed for severe cases to prevent dehydration.

For mild cases, the following tips may be helpful:

- Fluids should be taken during the times of the day when she feels least nauseated.
- The nausea is often worse when the stomach is empty. Try small amounts of food throughout the day.
- Every woman has a different food that won't cause nausea. Encourage her to eat the foods that sound good throughout the day. Dry, salty or sour foods may be helpful.
- Strong smells can make the nausea worse. Try eating cold foods and having someone else cook.
- Emotional support can help the woman cope with nausea and/or vomiting.

Resource Section

www.medlineplus.gov (Medline Plus)

- Click on "Medical Encyclopedia"
- Look for "Hyperemesis Gravidarum"

Hypertension – Chronic

See Risk 345 – Hypertension and Prehypertension
Also see Hypertension – Pregnancy Induced.

Description

Hypertension is also known as high blood pressure. Uncontrolled high blood pressure can increase the risk of serious health problems.

Causes

Essential hypertension or primary hypertension has no known cause.
Secondary hypertension is caused by another underlying condition such as:

- Kidney disease
- Adrenal disease
- Thyroid disease
- Abnormal blood vessels
- Certain medications, including birth control pills, cold remedies, decongestants, over-the-counter pain relievers and some prescription drugs, may also cause secondary hypertension.
- Illegal drugs, such as cocaine and amphetamines.

The risk factors you can control or manage include:

- Obesity
- Physical activity
- Stress
- Tobacco use
- Alcohol use
- Salt intake

Symptoms

Most people with high blood pressure have no signs or symptoms.
Headaches, dizziness or nosebleeds are common symptoms of high blood pressure.
Other symptoms sometimes associated with high blood pressure generally are caused by other conditions that can lead to high blood pressure. Such symptoms include:

- Excessive sweating
- Muscle cramps
- Weakness
- Frequent urination
- Rapid or irregular heartbeat (palpitations)

Counseling Notes

The goal of treatment is to prevent health complications that may occur as a result of high blood pressure.
Treatment may require medications, lifestyle changes or a combination of both.
Lifestyle changes that are helpful include:

- Eat a healthy diet with plenty of grains, fruits, vegetables and low-fat dairy foods
- Limit sodium (salt) in the diet
- Drink less caffeine and alcohol
- Lose weight (even losing a small amount is helpful)
- Exercise regularly
- Reduce stress
- Get enough sleep
- Stop smoking

Resource Section

www.mayoclinic.com (Mayo Clinic)

- Under "Find Diseases & Conditions" look for "Hypertension"

Hypertension – Pregnancy Induced

- See Risk 345 – Hypertension and Prehypertension
- Also see Hypertension – Chronic.
- See Risk 304 – History of Preeclampsia

Description

Pregnancy induced hypertension (PIH) is a condition of high blood pressure that sometimes occurs during pregnancy.
It usually begins in the third trimester, or last 3 months of pregnancy. Occasionally it can begin even earlier, but this is not common.
May also be called preeclampsia or toxemia.

Causes

- The cause of PIH is unknown.
- Some conditions may increase the risk of developing PIH, including the following:
    - Pre-existing hypertension (high blood pressure)
    - Kidney disease
    - Diabetes
    - PIH with a previous pregnancy
    - Mother's age, younger than 20 or older than 40
    - Multiple babies (twins, triplets)

Symptoms

Symptoms may include:

- Increased blood pressure
- Protein in the urine
- Edema (swelling of legs, face and belly)
- Sudden weight gain
- Visual changes such as blurred or double vision
- Nausea, vomiting
- Pain around the stomach
- Passing small amounts of urine

Counseling Notes

The only cure for this condition is delivery, but even following birth, the condition may continue for several hours or weeks.
The standard treatment is bed rest with blood pressure monitoring.
Other monitoring tests might include blood tests, fetal heart rate monitoring, urine tests for protein, and assessment of amniotic fluid volume and fetal growth if necessary.
In PIH, blood flow is reduced to many organ systems in the expectant mother including the liver, kidneys, brain, uterus, and placenta.
There are also other problems that may develop as a result of PIH, including:

- Placental abruption (premature detachment of the placenta from the uterus)
- Intrauterine growth restriction (poor growth of the baby)
- Stillbirth

If untreated, severe PIH may cause dangerous seizures and even death in the mother and fetus.
Because of these risks, it may be necessary for the baby to be delivered early, before 37 weeks gestation.
Education about the warning symptoms is also important because early recognition may help women receive treatment and prevent worsening of the disease.

Resource Section

www.medlineplus.gov (Medline Plus)

- Click on "Medical Encyclopedia"
- Look for "Preeclampsia"

Hypoglycemia

See Risk 356 – Hypoglycemia

Description

Hypoglycemia is a condition caused by an abnormally low level of blood sugar (glucose), our body's main energy source.

Causes

- Diabetes
- The causes of hypoglycemia in people without diabetes are:
    - Medications
    - Alcohol
    - Certain cancers
    - Diseases of kidney, liver or heart
    - Hormonal deficiencies
    - Disorders that result in the body producing too much insulin

Symptoms

The following symptoms are not specific to hypoglycemia. There may be other causes. The only way to know for sure that hypoglycemia is the cause is to test the blood sugar level.

- Irregular heart rhythm
- Fatigue
- Pale skin
- Shakiness
- Irritability
- Anxiety
- Sweating
- Hunger

Counseling Notes

Eating small, frequent meals can help prevent hypoglycemia.
Hypoglycemia can be an indication of any number of illnesses.
Eating food or candy usually raise the blood sugar level and help relieve symptoms.
For people with diabetes, taking insulin or oral diabetes medications regularly, along with a regular diet, will help prevent hypoglycemia.

Resource Section

www.mayoclinic.com (Mayo Clinic)

- Click on "Diseases & Conditions"
- Look for "Hypoglycemia"

Inborn Errors of Metabolism

See Risk 351 – Inborn Errors of Metabolism

Description

Inborn errors of metabolism are rare.

They are genetic disorders in which the body cannot turn food into energy (metabolize food) normally.
The disorders are usually caused by defects in the enzymes involved in the biochemical pathways that break down food components.

If untreated, several inborn errors of metabolism can cause developmental delays or other medical problems.

Resource Section

www.medlineplus.gov (Medline Plus)

- Click on "Medical Encyclopedia"
- Look for "Inborn Errors of Metabolism"

Metabolic Disorders Program at the Child Development and Rehabilitation Center, Oregon Health & Sciences University:

https://www.ohsu.edu/xd/health/child-development-and-rehabilitation-center/clinics-and-programs/cdrc-portland-programs/metabolic-disorders-program/

Inflammatory Bowel Disease

See Risk 342 – Gastrointestinal Disorders

Description

Inflammatory bowel disease causes chronic inflammation of the digestive system. It includes ulcerative colitis and Crohn's disease. These diseases are painful and sometimes lead to life-threatening problems. Crohn's disease can affect any part of the digestive system. Ulcerative colitis affects only the colon (large intestine).

Causes

The cause of inflammatory bowel disease is unknown.

Symptoms

Symptoms include one or more of the following:

- abdominal pain
- blood in stool
- decreased appetite
- weight loss

Counseling Notes

There is no known medical cure. However, medications or surgery may greatly reduce the symptoms and may keep them from returning.
Certain foods and drinks can worsen the symptoms and should be avoided.

Resource Section

www.mayoclinic.com (Mayo Clinic)
- Under "Find Diseases & Conditions look for "Inflammatory Bowel Disease"

Intrauterine Growth Restriction (IUGR)

See Fetal Growth Restriction Risk 336.

Juvenile Rheumatoid Arthritis (JRA)

See Risk 360 – Other Medical Conditions

Description

Now referred to as Juvenile idiopathic arthritis, it is the most common type of arthritis in children under the age of 16. Arthritis is an inflammation of the joints that is characterized by swelling, heat, and pain. Arthritis can be short-term, lasting for just a few weeks or months, then going away forever. It can also be chronic, lasting for months or years. In rare cases, it can last a lifetime.

Types of rheumatoid arthritis include:

- Polyarticular arthritis
    - Symptoms include swelling or pain in 5 or more joints
    - The small joints of the hands are affected as well as the weight-bearing joints such as the knees, hips, ankles, feet, and neck
    - In addition, a low-grade fever may appear, as well as bumps or nodules on the body on areas subjected to pressure from sitting or leaning.
- Pauciarticular JRA
    - Affects 4 or fewer joints
    - Symptoms include pain, stiffness, or swelling in the joints
    - The knee and wrist joints are the most commonly affected
    - An inflammation of the iris (the colored area of the eye) may occur with or without active joint symptoms
- Systemic JRA
    - Affects the whole body.
    - Symptoms include high fevers that often increase in the evenings and then may suddenly drop to normal.
    - During the onset of fever, the child may feel very ill, appear pale, or develop a rash. The rash may suddenly disappear and then quickly appear again.
    - The spleen and lymph nodes may also become enlarged.
    - Eventually many of the body's joints are affected by swelling, pain, and stiffness.

Causes

The cause is not known it is thought to be an autoimmune disease, meaning the body attacks and destroys healthy body tissue by mistake.

Counseling Notes

In many cases, JRA may be treated with a combination of medication, physical therapy, and exercise.

Resource Section

- www.mayoclinic.com (Mayo Clinic)

- Click on "Diseases and Conditions"
- Look for "Juvenile Idiopathic Arthritis"

Kidney Disease

See Renal Disease Risk 346.

Lactose Intolerance

See Risk 355 – Lactose Intolerance

Description

People with lactose intolerance don't make enough of the enzyme lactase. Lactase breaks down lactose (milk sugar) into simpler forms that can be absorbed from the intestines into the blood. When there is not enough lactase, lactose continues through the intestines causing the symptoms.

Causes

- For most people, lactase deficiency is a condition that develops naturally over time.
- After about the age of 2 years, the body begins to produce less lactase. However, many people may not experience symptoms until they are much older.
- Certain diseases and injuries to the small intestine can reduce the amount of enzymes produced.
- In rare cases, children are born without the ability to produce lactase (galactosemia).

Symptoms

Symptoms usually begin about 30 minutes to 2 hours after eating or drinking foods containing lactose. They include:

- Nausea
- Abdominal cramps
- Bloating and gas
- Diarrhea

Counseling Notes

No treatment can improve the body's ability to produce lactase, but symptoms can be controlled through diet.
Dietary control of lactose intolerance depends on people learning through trial and error how much lactose they can handle.
Many people can tolerate small amounts of milk, ice cream, yogurt and aged cheeses (like cheddar and Swiss).
For people avoiding dairy products, green vegetables and fish with soft, edible bones (salmon and sardines) are excellent sources of calcium.

Resource Section

www.niddk.nih.gov (National Institute of Diabetes & Digestive & Kidney Diseases)

- Click on "Health Topics/Digestive"
- Look for "Lactose Intolerance"

Lead Poisoning

See Risk 211 – Elevated Blood Lead Levels

Description

Lead is toxic to the body. Children particularly are susceptible to lead poisoning because it can build up in their nervous system and brains as their bodies grow and develop. Dangerous levels of lead in children may cause serious health problems, including lower intelligence and poor school performance. Pregnant women are at increased risk because lead can damage the developing fetus.

Causes

Babies and young children especially are susceptible to lead exposure because they have a tendency to put objects in their mouths. Their hands or other objects placed in their mouths may be contaminated with lead dust. They may also eat paint chips or chew on windowsills or other wood areas painted with lead paint.

- Peeling lead-based paint in older homes (painted before 1978).
- House dust that contains lead (remodeling a house can increase the lead dust in the house).
- Using pottery or ceramics made in other countries for cooking, storing or serving foods/drinks.
- Using traditional or home remedies, such as Axarcon, Alarcon, Greta, Rueda, Pay-loo-ah, or Kohl.
- Water from lead pipes (especially hot water) – most common in houses built 1970-1985.

Symptoms

- Lead poisoning may go undetected because frequently there are no obvious signs or symptoms
- Signs and symptoms of lead poisoning in children are nonspecific and may include:
    - Irritability
    - Loss of appetite
    - Weight loss
    - Sluggishness
    - Abdominal pain
    - Vomiting
    - Constipation
    - Weakness from anemia
- Lead poisoning is also dangerous to adults. Signs and symptoms of lead poisoning in adults may include:
    - Pain, numbness or tingling of the hands and feet
    - Muscular weakness
    - Headache
    - Abdominal pain
    - Memory loss

Counseling Notes

Everyday Precautions:

- Wash your children's hands after they play and going to bed.
- Clean your floors with a wet mop and wipe furniture, windowsills and other dusty surfaces with a damp cloth.
- Don't let your children play near major roadways or bridges.
- Prepare meals that are high in iron and calcium. A nutritious diet helps prevent lead absorption in your children's bodies.
- Run cold water for at least a minute before using, especially if it hasn't been used for a while.
- Use only cold water to make baby formula or for cooking.

Home Renovation Precautions:

- Wear protective equipment and clothing.
- Change your clothes, take a shower and wash your hair before leaving the job.
- Be careful where you eat. Don't eat or drink in an area where lead dust may be present.
- Don't use an open-flame torch to remove paint.
- Don't use the highest setting on a heat gun.
- Use caution in painting over old lead paint.

Resource Section

Oregon Health Authority
https://www.oregon.gov/oha/PH/HEALTHYENVIRONMENTS/HEALTHYNEIGHBORHOODS/LEADPOISONING/Pages/lead.aspx

Liver Disease

See Risk 342 – Gastrointestinal Disorders

Description

Liver disease is an acute or chronic damage to the liver, usually caused by infection, injury, or intake of drugs or poisons. The disease can also be categorized by the effect it has on the liver.

- Hepatitis is an inflammation of the liver.
- Cirrhosis involves scarring of the liver and cell death.
- Fatty liver involves accumulation of fat in the liver.

Causes

Cirrhosis – Anything that causes severe ongoing injury to the liver can lead to cirrhosis. It is marked by the death of liver cells and scar tissue formation. It is a progressive disease that creates irreversible damage. Cirrhosis has no signs or symptoms in its early stages, but as it progresses, it can cause fluid build-up in the abdomen, muscle wasting, bleeding from the intestines, easy bruising, and a number of other problems. In extreme cases, liver transplantation is needed.

Fatty liver causes the liver to enlarge and function abnormally. The most common cause is excessive alcohol intake. Fatty liver can usually be cured by not drinking alcohol.

Counseling Notes

Many people with severe liver disease are on a special diet.

Resource Section

- www.mayoclinic.com (Mayo Clinic), Under "Find Diseases & Conditions" look for "Cirrhosis"

Lupus Erythematosus

See Risk 360 – Other Medical Conditions

Description

Lupus is one of many disorders of the immune system known as autoimmune diseases. In autoimmune diseases, the immune system turns against parts of the body it is designed to protect. This leads to inflammation and damage to various body tissues.

Causes

The exact cause is unknown. It is likely that a combination of genetic, environmental, and possibly hormonal factors work together to cause the disease.
Lupus is three times more common in African American women than in Caucasian women and is also more common in women of Hispanic, Asian, and Native American descent.

Symptoms

Lupus can affect many parts of the body, including the joints, skin, kidneys, heart, lungs, blood vessels, and brain.
Symptoms can range from mild to severe and may come and go over time.
Although people with the disease may have many different symptoms, some of the most common ones include:

- Extreme fatigue
- Painful or swollen joints
- Unexplained fever
- Skin rashes
- Kidney problems
- Mouth ulcers
- Chest pain upon deep breathing

Counseling Notes

- Lupus is characterized by periods of illness, called flares, and periods of wellness, or remission.

- At present, there is no cure for lupus. However, lupus can be effectively treated with drugs, and most people with the disease can lead active, healthy lives.
- Although a lupus pregnancy is considered high risk, most women with lupus carry their babies safely to the end of their pregnancy.
- Women with lupus have a higher rate of miscarriage and premature births compared with the general population.
- Lupus patients with a history of kidney disease have a higher risk of pre-eclampsia (hypertension with a buildup of excess watery fluid in cells or tissues of the body).
- Pregnant women with lupus, especially those taking corticosteroids, also are more likely to develop high blood pressure, diabetes, hyperglycemia (high blood sugar), and kidney complications, so regular care and good nutrition during pregnancy are essential.
- It is also advisable to have access to a neonatal (newborn) intensive care unit at the time of delivery in case the baby requires special medical attention.

Resource Section

www.nih.gov (National Institutes of Health)

- Click on "Health Topics"
- Look for "Lupus"

Malabsorption Syndromes

See Risk 342 – Gastrointestinal Disorders

Description

Malabsorption syndrome is a change in the ability of the intestine to absorb nutrients adequately into the blood. Protein, fats, and carbohydrates normally are absorbed in the small intestine.

Causes

There are many different conditions that affect fluid and nutrient absorption by the intestine. The causes include:

- Conditions that damage the lining of the small intestine (e.g. Celiac disease)
- Failure of the body to produce the enzymes needed to digest foods (e.g. Cystic Fibrosis).
- Congenital defects or diseases of the pancreas, gall bladder or liver.
- Inflammation, infection, injury or surgical removal of portions of the intestine (e.g. Crohn disease)
- Radiation therapy.
- The use of some antibiotics.

Symptoms

- Weakness, fatigue
- Diarrhea
- Fatty, greasy, foul-smelling stools
- Abdominal swelling with cramps
- Bloating, and gas
- Weight loss
- Muscle wasting

Counseling Notes

Fluid and nutrient monitoring and replacement is essential for any person with malabsorption syndrome.
Hospitalization may be required when the disease is severe.
If the person is able to eat, the diet and supplements should provide bulk and be rich in carbohydrates, proteins, fats, minerals, and vitamins.
The person should be encouraged to eat several small, frequent meals throughout the day, avoiding fluids and foods that promote diarrhea.
The treatment and expected course for the individual with malabsorption syndrome varies depending on the cause.

Resource Section

www.medlineplus.gov/ **(Medline)**

- Click on "Medical Encyclopedia"
- Look for "Malabsorption "

Meningitis

See Risk 352A – Infectious Diseases - Acute

Description

Meningitis is an infection and inflammation of the membranes (meninges) and cerebrospinal fluid surrounding the brain and spinal cord.

Causes

- Viruses, bacteria and fungi can cause meningitis.
- Bacterial meningitis is generally much more serious than viral meningitis, and quick treatment is necessary.
- Viral meningitis is most common.

Symptoms

It is easy to mistake the early signs and symptoms of meningitis for the flu. They may develop over a period of one or two days, but some types of meningitis can prove fatal in a matter of days. These are the most common symptoms:

- A high fever
- Severe headache
- Vomiting or nausea with headache
- Confusion
- Seizures
- Sleepiness or difficulty waking up
- Stiff neck
- Sensitivity to light
- Lack of interest in drinking and eating
- Newborns and young infants may not have the classic signs and symptoms of headache and stiff neck. Instead, they may cry constantly, seem unusually sleepy or irritable, and eat poorly. Sometimes the soft spots on an infant's head may bulge.

Counseling Notes

Viral meningitis may resolve without treatment in a few days. Mild cases of viral meningitis are usually treated with bed rest, plenty of fluids and over-the-counter pain medications to help reduce fever and relieve body aches.
Bacterial meningitis can be serious and can come on very quickly. Acute bacterial meningitis requires prompt treatment with intravenous antibiotics to ensure recovery and reduce the risk of complications.

Resource Section

www.mayoclinic.com (Mayo Clinic)

- Click on "Diseases & Conditions"
- Look for "Meningitis"

Meningocele

See Neural Tube Defects.

Myelomeningocele

See Neural Tube Defects.

Necrotizing Enterocolitis

See Small Bowel Enterocolitis and Syndrome.

Neural Tube Defects (NTD)

See Risk 339 – History of a Birth with a Congenital Birth Defect
See Risk 348 – Central Nervous System Disorders

Description

Neural tube defects (NTDs) are major birth defects of a baby's brain or spine. During the first few weeks of pregnancy, the neural tube (that later turns into the brain and spine) does not form right and the baby's brain or spine is damaged. The two most common NTDs are:

- Spina bifida (myelomeningocele, meningocele and occulta)
- Anencephaly

- Spina bifida**:**
  - Occurs when the spine and backbones do not close all the way. A sac of fluid comes through an opening in the baby's back. Much of the time, part of the spinal cord is in this sac and it is damaged.
  - Most children born with spina bifida live full lives, but they often have lifelong disabilities and need many surgeries. Some of their problems include:
  - Not being able to move lower parts of their body.
  - Loss of bowel and bladder control.
  - Fluid building up and putting pressure on the brain (hydrocephalus), which can be fixed with surgery.
  - Learning disabilities.
- Anencephaly**:**
  - Occurs when the brain and skull bones do not form right. Part or all of the brain and skull bones might be missing.
  - Babies with this defect usually die before birth (miscarriage) or shortly after birth.

Causes

All women are at risk of having a baby with a NTD. Risk is increased with:

- Low folic acid intake.
- Previous NTD-affected pregnancy.

- Diabetes when the blood sugar is out of control.
- Some medicines (like some of those that treat epilepsy).
- Obesity.
- High temperatures in early pregnancy (such as fever that lasts a while, or using hot tubs and saunas).
- Hispanic ethnicity (Hispanic women tend to have more babies affected by NTDs).

Symptoms

There are no symptoms. A health care provider may find the NTD during an ultrasound exam.

Counseling Notes

Folic acid is a B vitamin that the body needs to make healthy new cells. If a woman has enough folic acid in her body before and during pregnancy, her baby is less likely to have an NTD.
Women need to take folic acid every day, starting **before** they get pregnant.
Every woman should take 400 micrograms (400 mcg or 0.4 mg) of folic acid daily in a vitamin supplement or in foods that have been enriched with folic acid (the label on the side of the box should say "100%" next to folic acid).

Resource Section

www.mayoclinic.com (Mayo Clinic)

- Under"Find Disease &Conditions"
- Look for "Spina Bifida"

Oregon Health Authority:

https://www.oregon.gov/oha/PH/HEALTHYPEOPLEFAMILIES/DATAREPORTS/Pages/birth-anomalies.aspx

Nutrition-Related Congenital Birth Defects

See Neural Tube Defects.
See Zinc Deficiency Related Congenital Birth Defects.
See Vitamin A Excess – Congenital Birth Defects.

Occulta

See Neural Tube Defects.

Pancreatitis

See Risk 342 – Gastrointestinal Disorders

Description

Pancreatitis is an inflammation of the pancreas. The pancreas is a large organ that secretes digestive enzymes into the small intestine. These enzymes help digest fats, proteins, and sugars in food. The pancreas also releases the hormones insulin and glucagon into the bloodstream. These hormones help the body use the glucose it takes from food for energy.

- **Acute pancreatitis** occurs suddenly and lasts for a short period of time and usually resolves. Some people have more than one attack and recover completely after each. However, it can be a severe, life-threatening illness with many complications. Bleeding, low blood pressure, organ failure, and death may follow.
- **Chronic pancreatitis** occurs when digestive enzymes attack and destroy the pancreas and nearby tissues, causing scarring and pain.

Causes

- The usual cause of **acute pancreatitis** is gallstones and drinking too much alcohol.
- The usual cause of **chronic pancreatitis** is many years of alcohol abuse. Other causes include blocked or narrowed pancreatic duct, heredity, high levels of calcium in the blood, high levels of blood fats, some drugs and unknown causes.

Symptoms

- Symptoms of **acute pancreatitis** include severe pain in the abdomen that may also reach to the back and other areas. Other symptoms include swollen abdomen, nausea, vomiting, and fever.
- Most people with **chronic pancreatitis** have abdominal pain, although some people have no pain at all. The pain may get worse when eating or drinking, spread to the back, or become constant and disabling. Other symptoms include nausea, vomiting, weight loss, and fatty stools.

Counseling Notes

In general, people with pancreatitis must stop drinking alcohol, eat a prescribed diet, and take the proper medications.

Resource Section

www.niddk.nih.gov (National Institute of Diabetes & Digestive & Kidney Diseases)

- Click on "Health Topics/Digestive"
- Scroll to "Digestive Diseases Topics"
- Look for "Pancreatitis"

Parasitic Infections (Parasites)

See Pinworm and Tapeworm.

Persistent Proteinuria

See Risk 346 – Renal Disease

Description

- Proteinuria describes a condition in which urine contains an abnormal amount of protein.
- Protein in the urine can be a marker of almost any type of kidney disease, so tests are always needed if the cause of proteinuria is to be confirmed.
- Persistent proteinuria can be serious, especially in clinical illnesses or when accompanied by other urinary abnormalities, such as hematuria (blood in the urine) or bacteruria (bacteria in the urine).

Causes

The most common causes are:

- High blood pressure
- Diabetes
- Infection
- Glomerulonephritis
- Nephritis (inflammation of the kidney)

Symptoms

- Large amounts of protein in the urine may cause the urine to look foamy in the toilet.
- Because the protein has left your body, your blood can no longer soak up enough fluid and you may notice swelling in your hands, feet, abdomen, or face.
- More commonly, proteinuria may occur without any signs or symptoms.
- The amount of protein in the urine can be determined by testing the urine.

Counseling Notes

- The underlying kidney disease may be treatable with drugs.
- The type of treatment depends on the cause.

- Reducing the amount of salt and water taken in the diet each day can treat water retention.
- Some cases also require drugs to make the kidneys produce more urine.

Resource Section

www.niddk.nih.gov (National Institute of Diabetes & Digestive & Kidney Diseases)

- Click on "Health Topics/Kidney Disease"
- Scroll down to"Kidney Disease Topics"

What you should know about Albuminuria (Proteinuria):
https://www.kidney.org/atoz/content/proteinuriawyska

Pinworm

See Risk 352A – Infectious Diseases - Acute

Description and Causes

- Pinworms are small, white worms which infect the large intestine.
- The pinworm is about the length of a staple.
- The medical name for the pinworm is Enterobius vermicularis.
- It lives for the most part within the rectum of humans.
- While an infected person is asleep, female pinworms leave the intestines through the anus and deposit eggs on the skin around the anus.
- Within a few hours of being deposited on the skin around the anus, pinworm eggs become infective (capable of infecting another person).
- They can survive up to 2 weeks on clothing, bedding, or other objects.
- Infection is acquired when these eggs are accidentally swallowed.
- Preschool and school-age children have the highest rates of pinworm infection.
- Institutional settings, including day care facilities, often harbor cases of pinworm infection.

Symptoms

- The classic symptoms of pinworms consist of intense itching around the anus and/or vagina.
- Less common symptoms range from upset stomach to loss of appetite, irritability, loss of appetite, restlessness, and insomnia.

Counseling Notes

Usually a single tablet of mebendazole (Vermox) is used for treatment.
Prevention includes:

- Washing hands after using the toilet, after playing outside, and before eating.
- Bathing every day and changing underwear daily.
- Keeping children's fingernails short and clean.

Resource Section

www.mayoclinic.com (Mayo Clinic)
Under "Find Diseases & Conditions" look for "Pinworm Infection"

Pneumonia

See Risk 352A – Infectious Diseases - Acute

Description

Pneumonia is an inflammation of the lungs usually caused by infection with bacteria, viruses, fungi or other organisms.

Causes

People with other chronic illnesses or impaired immunity may be more likely to get pneumonia.

Symptoms

Pneumonia can be difficult to spot. Symptoms are similar to a cold or the flu. The common symptoms are:

- Chest pain
- Fever
- Chills
- Cough
- Shortness of breath

Counseling Notes

- Serious pneumonia can be life threatening.
- Treatments for pneumonia vary, depending on the severity of your symptoms and the type of pneumonia you have.
- Bacterial pneumonia is usually treated with antibiotics.
- Viral pneumonia is usually treated with rest and fluids.
- Mycoplasma pneumonias are treated with antibiotics.
- In addition to these treatments, the doctor may recommend over-the-counter medications to reduce fever, relieve aches and pains, and soothe the cough associated with pneumonia.
- Severe pneumonia may be treated by hospitalization, including intravenous antibiotics and oxygen.

Resource Section

www.mayoclinic.com (Mayo Clinic)

Under "Find Diseases and Conditions" look for "Pneumonia"

Pyelonephritis (Kidney Infection)

See Risk 346 – Renal Disease

Description

Pyelonephritis is an infection of the kidney and the ducts that carry urine away from the kidney (ureters).

Causes

- Pyelonephritis most often occurs as a result of a urinary tract infection, particularly in the presence of occasional or persistent backflow of urine from the bladder into the ureters or kidney.
- Types of pyelonephritis are:
    - Acute uncomplicated pyelonephritis (sudden development of kidney inflammation)
    - Chronic pyelonephritis (a long-standing infection that doesn't clear)
    - Reflux nephropathy (an infection that occurs in the presence of an obstruction)
    - Although cystitis (bladder infection) is common, pyelonephritis occurs much less often.
    - The risk is increased when there is a history of chronic or recurrent urinary tract infection and when a particularly aggressive type of bacteria causes the infection.

Symptoms

Symptoms may include:

- Flank pain or back pain
- Severe abdominal pain (occurs occasionally)
- Fever
- Chills with shaking
- Warm skin
- Flushed or reddened skin
- Moist skin
- Vomiting, nausea

- Fatigue
- Painful urination
- Increased urinary frequency or urgency
- Need to urinate at night (nocturia)
- Abnormal urine color
- Blood in the urine
- Foul or strong urine odor

Counseling Notes

- The goals of treatment are to control the infection and reduce the symptoms.
- Acute symptoms usually resolve within 48 to 72 hours after appropriate treatment.
- Due to the risk of permanent kidney damage, prompt treatment is recommended.
- In diabetic patients and pregnant women, follow-up should include a urine culture at the completion of therapy to ensure that bacteria are no longer present in the urine.
- Most cases of pyelonephritis resolve without complication after the treatment.
- However, the treatment may need to be aggressive or prolonged. If sepsis occurs, it can be fatal.

Resource Section

www.niddk.nih.gov **(National Institutes of Health)**

- Under Health Topics click on "Kidney Disease"
- Look for "Kidney Infection (Pyelonephritis)"

Renal Disease

See Risk 346 – Renal Disease

Description

The urinary system cleanses the blood and rids the body of excess water and waste in the form of urine. The urinary tract consists of two kidneys, one ureter from each

kidney (tubes that drain urine from the kidneys), the bladder (a storage sac for urine) and the urethra (the tube that transports the urine out of the body).

The kidneys filter the waste from the blood and help your body maintain the correct fluid level.

When the kidneys are not working properly, waste products and fluid can build up to dangerous levels, creating a life-threatening situation.

There are more than 100 disorders, diseases, and conditions that can lead to progressive destruction of the kidneys. Some of the more common problems are described here:

- Obstruction – The urinary tract can become obstructed (for example, from a kidney stone, tumor, expanding uterus during pregnancy, or enlarged prostate gland).
- Cystitis (bladder infection) – Clients cannot qualify for WIC with only a bladder infection.
- Pyelonephritis – An infection of kidney tissue; most often, it is the result of cystitis that has spread to the kidney.
- Glomerular diseases – Diseases that attack the blood filtering units of the kidneys.
- Glomerulonephritis (also called nephritis or nephritic syndrome) - The glomeruli in the kidneys become inflamed.
- Nephrotic syndrome – The blood loses protein to the urine because of damage to the membrane between the glomeruli and tubules.
- Other factors – Any situation in which there is severe blood loss or reduced blood flow may prevent the kidneys from working correctly.

Symptoms

- Swelling or puffiness, particularly around the eyes or in the face, wrists, abdomen, thighs or ankles.
- Urine that is foamy, bloody, or coffee-colored.
- A decrease in the amount of urine.
- Problems urinating, such as a burning feeling or abnormal discharge during urination, or a change in the frequency of urination, especially at night.
- Mid-back pain (flank).
- High blood pressure.

Counseling Notes

- In general, the earlier kidney or urinary disease is recognized, the more likely it is to be treatable.
- Dietary restrictions, drug therapy, and surgical be appropriate.
- If the kidneys can no longer effectively remove waste and water from the body, a dialysis machine used several times a week can take over kidney filtration.
- Kidney transplant surgery is another option when kidneys fail.
- People with diabetes or high blood pressure should control their diseases to prevent or minimize kidney damage.

Resource Section

www.niddk.nih.gov (National Institutes of Health)

- Under Health Topics click on "Kidney Disease"

Rheumatoid Arthritis

See Juvenile Rheumatoid Arthritis.

Short Bowel Syndrome

See Risk 342 – Gastrointestinal Disorders

Description

Short Bowel Syndrome (SBS) is defined as malabsorption resulting from loss of a significant length of the small intestine. It is also known as small bowel syndrome.

Causes

Most common after part of the intestine is removed during surgery (bowel resection). This surgery is most common in the newborns who have necrotizing enterocolitis.

Counseling Notes

- Children with SBS need regular nutrition monitoring to prevent problems associated with fluid and nutrient malabsorption.
- Immediately after bowel surgery that results in SBS, total parenteral nutrition (nutrition provided through IV) is required until bowel function returns.
- Normal eating may be achieved in a matter of weeks to months, or may never be achieved.
- Once a child is taking food through the mouth, adequacy of absorption becomes a concern.
- It is frequently necessary to give fat-soluble vitamins (like A, D, E, K). They may also need vitamin B12 injections every 1 to 3 months.
- B12 status, calcium and iron levels need to be monitored periodically.
- Sometimes, oral antibiotics may be needed to control bacterial overgrowth.

Resource Section

www.medlineplus.gov (Medline Plus)

- Click on "Medical Encyclopedia"
- Look for "Short Bowel Syndrome"

Sickle Cell Anemia

See Risk 349 – Genetic and Congenital Disorders

Description

Sickle cell anemia affects the red blood cells. Normal red blood cells are smooth and round like doughnuts. They move easily through blood vessels to carry oxygen to all parts of the body.

In sickle cell anemia, the red blood cells become hard, sticky, and shaped like sickles or crescents. When these hard and pointed red cells go through the small blood vessels, they tend to get stuck and block the flow of blood. This can cause pain, damage, and a low blood count or anemia.

Sickle cell trait is different from sickle cell anemia. A person with sickle cell trait does not have the disease but carries the gene that causes the disease. sSickle cell trait is not a risk factor for WIC.

Causes

- Children who inherit sickle cell genes from both parents will have sickle cell anemia.
- Children who inherit the sickle cell gene from only one parent will not have the disease. They will have sickle cell trait.
- Sickle cell anemia is common in people whose families come from:
    - Parts of Africa (the region south of the Sahara Desert)
    - Spanish-speaking areas like South America, Cuba, and Central America
    - Saudi Arabia and India
    - Mediterranean countries, such as Turkey, Greece, and Italy

Symptoms

The signs and symptoms of sickle cell anemia are different in each person. Some people have mild symptoms. Others have very severe symptoms and are often hospitalized for treatment.

The common symptoms are:

- Fatigue (feeling very tired)
- Paleness
- Yellowing of the skin and eyes (jaundice)
- Shortness of breath
- Pain
- Infections
- Acute Chest Syndrome – similar to pneumonia, it is caused by infection or by trapped sickle cells in the lung
- Delayed growth

Counseling Notes

Health maintenance for patients with sickle cell disease starts with early diagnosis, preferably in the newborn period and includes:

- Penicillin prophylaxis
- Vaccination against pneumococcus bacteria
- Folic acid supplementation
- Blood transfusions

Resource Section

www.nhlbi.nih.gov (National Heart, Lung and Blood Institute)

- Click on "Health Topics/Health Topics A-Z)"
- Look for "Sickle Cell Disease"

Small Bowel Enterocolitis and Syndrome

See Risk 342 – Gastrointestinal Disorders

Description

Also known as necrotizing enterocolitis. This disease causes intestinal tissue to die. It occurs primarily in premature infants or sick newborns.

Causes

- The cause for this disorder is unknown, but it is thought that a decreased blood flow to the bowel keeps the bowel from producing the normal protective mucus.
- Bacteria in the intestine may also be a cause.
- At risk are small, premature infants, infants who are fed formula, and infants who have received blood exchange transfusions.

Symptoms

- Abdominal distension.
- Vomiting, diarrhea, and blood in stool.
- Not feeding properly, lethargy and weakness.

Counseling Notes

- Feedings should be stopped and gas relieved from the bowel by inserting a small tube into the stomach.
- Intravenous fluid replaces formula or breast milk.
- Antibiotic therapy is needed in most cases.
- If necessary, the dead bowel tissue is removed through surgery.

Resource Section

www.medlineplus.gov (Medline Plus)

- Click on "Medical Encyclopedia"
- Look for "Necrotizing Enterocolitis"

Small for Gestational Age (SGA)

See Risk 151 – Small for Gestational Age (SGA)

Description

Small for gestational age (SGA) is a term used to describe a baby who is smaller than usual for the baby's age, gender and genetic heritage.

The SGA baby is smaller than 90 percent of all other babies of the same gestational age.

SGA babies may appear physically and neurologically mature. Small for gestational age babies may be full-term or premature.

SGA babies may be:

- Proportionately small (equally small all over), or

- They may be of normal length and size but have lower body weight. SGA babies may have problems at birth including the following:
- Decreased oxygen levels.
- Low Apgar scores (an assessment that helps identify babies with difficulty adapting after delivery).
- Meconium aspiration (inhalation of the first stools passed in utero) which can lead to difficulty breathing.
- Hypoglycemia (low blood sugar).
- Difficulty maintaining normal body temperature.
- Polycythemia (too many red blood cells).

Causes

- Most SGA babies are small because of growth problems that occur during pregnancy.
- Many babies with SGA have a condition called intrauterine growth restriction (IUGR). IUGR occurs when the baby does not receive the nutrients and oxygen needed for proper growth and development of organs and tissues. IUGR can begin at any time in pregnancy.
- When the fetus does not receive enough oxygen or nutrients during pregnancy, overall body and organ growth is limited, and tissue and organ cells may not grow as large or as numerous.

Some factors that may contribute to SGA and/or IUGR include the following:

- Maternal factors:
- High blood pressure.
- Chronic kidney disease.
- Advanced diabetes.
- Heart or lung disease.
- Malnutrition, anemia.
- Infection.
- Substance use (alcohol, drugs).
- Cigarette smoking.
- Factors involving the uterus and placenta:
    - Decreased blood flow in the uterus and placenta.
    - Placental abruption (placenta detaches from the uterus).
    - Placenta previa (placenta attaches low in the uterus).

- Infection in the tissues around the fetus.
- Factors related to the developing baby (fetus):
- Multiple pregnancy (twins, triplets, etc.).
- Infection.
- Birth defects.
- Chromosomal abnormality.

Counseling Notes

Babies with SGA may be physically more mature than their small size indicates. But they may be weak and less able to tolerate large feedings or to stay warm.

Specific treatment for SGA will be determined by the baby's physician based on:

- Gestational age, overall health, and medical history.
- Extent of the condition.
- Tolerance for specific medications, procedures, or therapies.
- How long the condition is expected to last.
- Parent's opinion or preference. Treatment of the SGA baby may include:
- Temperature controlled beds or incubators.
- Tube feedings (if the baby does not have a strong suck).
- Checking for hypoglycemia (low blood sugar) through blood tests.
- Monitoring of oxygen levels.
- Babies who are also premature may have additional needs including oxygen and mechanical help to breathe.

Prevention of SGA includes:

- Prenatal care to identify problems with growth.
- Avoiding smoking and use of substances such as drugs and alcohol.
- Eating a healthy diet in pregnancy.

Resource Section

Oregon Pediatric Nutrition Practice Group:

https://www.eatrightoregon.org/OPNPG/docs/Resources/Nutrition%20Practice%20Care%20Guidelines%20for%20Preterm%20Infants%20in%20the%20Community%202016.pdf

Spina Bifida

See Neural Tube Defects

Tapeworm

See Risk 352A – Infectious Diseases - Acute

Description and Causes

- Tapeworm infection is acquired by eating raw or undercooked meat of infected animals.
- Beef generally carry *Taenia saginata*, while pigs carry *Taenia solium*.
- The larvae from the infected meat develop in the human intestine into the adult tapeworm, which grows and can attain lengths greater than 12 feet.
- Adults and children with tapeworm (pork tapeworm only) can, if appropriate hygiene is lacking, become self-infected by ingesting eggs from their tapeworm which were picked up on their hands while wiping or
- Additionally, these individuals can expose other individuals to eggs, usually via food handling.
- Ingested eggs hatch in the intestinal track and the larvae migrate through the tissues, where they encyst.
- In rare instances, worms can cause a blockage in the intestine. If the tapeworm moves out of the intestine, they can cause growths and damage tissues including the brain, eye or heart. They can cause seizures and other neurological problems. This condition is called cysticercosis.

Symptoms

- Tapeworm infestation does not usually cause any symptoms.
- Infection is generally recognized when the infected person passes segments of tapeworm in the stool, especially if the segment is moving.

Counseling Notes

- Tapeworms are treated with oral medications, usually in a single dose.
- Adequate cooking of meat destroys the tapeworm larvae and will prevent infection by tapeworm.
- Good hygiene and hand washing after using the toilet will prevent self-infection in a person already infected with tapeworms.

Resource Section

www.medlineplus.gov (Medline Plus)

- Click on "Medical Encyclopedia"
- Look for "Tapeworm infection-beef or pork"

Thalassemia

See Risk 349 – Genetic and Congenital Disorders

Description

- Thalassemia is an inherited disorder that leads to the decreased production and increased destruction of red blood cells.
- This causes very low levels of hemoglobin or none at all. Hemoglobin is the red pigment in red blood cells that carries oxygen through the body to all of the organ systems.
- The loss of red blood cells leads to anemia and the inability of the body to deliver needed oxygen to maintain normal body function.
- Thalassemias are named for the amino acid chain in the hemoglobin molecule that is affected. (Amino acids are the building blocks of protein.) The two main types are:
    - Alpha thalassemia – the alpha chain is affected
    - Beta thalassemia – the beta chain is affected
- Thalassemias are also categorized by the number of genes that are defective:
    - Thalassemia minor – one abnormal gene

- Thalassemia major – two abnormal genes

Causes

- Abnormal genes must be inherited from both parents to develop the disease.
- If one gene is inherited, the person will be a carrier of the disease, but will not have symptoms.
- Thalassemia is more common in people from the following areas:
    - Alpha thalassemia – Southeast Asia, Malaysia, and Southern China
    - Beta thalassemia – areas surrounding the Mediterranean Sea, Africa, and Southeast China

Symptoms

Symptoms of thalassemia usually begin within 3-6 months of birth. Symptoms may include:

- Anemia, which may be mild, moderate, or severe
- Yellowish discoloration of the skin, tissues, and body fluids (jaundice)
- Enlarged spleen
- Fatigue and listlessness
- Reduced appetite
- Enlarged and fragile bones
- Growth problems
- Increased susceptibility to infection
- Skin paler than usual
- Hormone problems
- Heart failure
- Shortness of breath
- Liver problems
- Gallstones
- Alpha thalassemia usually causes milder forms of the disease, with varying degrees of anemia.
- The most severe form of alpha thalassemia major, which affects mainly individuals of Southeast Asian, Chinese and Filipino ancestry, results in newborn death.
- Beta thalassemia can be a mild form of disease, known as thalassemia intermedia, which causes milder anemia that rarely requires transfusions or extensive medical care.

- Thalassemia major, also known as Cooley's anemia, is a serious disease that requires regular blood transfusions and extensive medical care.

Counseling Notes

Treatment may include:

- Blood transfusions
- Iron chelation therapy
- Splenectomy (surgical removal of the spleen)
- Bone marrow transplant

Resource Section

www.medlineplus.gov (Medline Plus)

- Click on "Medical Encyclopedia"
- Look for "Thalassemia"

Tuberculosis (TB)

See Risk 352A – Infectious Diseases - Acute

Description

- Tuberculosis (often called TB) is an infectious disease that usually attacks the lungs, but can attack almost any part of the body.
- Someone with **TB disease** is sick and can spread the disease to other people.
- Someone with **TB infection** has the TB germs, or bacteria, in their body. The body's defenses are protecting them from the germs and they are not sick.

Cause

Tuberculosis is spread from person to person through the air. Usually a person has to be close to someone with TB disease for a long period of time. TB is usually spread between family members, close friends, and people who work or live together.

Risk Factors:

- People with HIV infection (the AIDS virus)
- People in close contact with those known to be infectious with TB
- People with medical conditions that make the body less able to protect itself from disease (for example: diabetes, or people undergoing treatment with drugs that can suppress the immune system, such as long-term use of corticosteroids)
- Foreign-born people from countries with high TB rates
- Some racial or ethnic minorities
- People who work in or are residents of long-term care facilities (nursing homes, prisons, some hospitals)
- Health care workers and others such as prison guards
- People who are malnourished (weak)
- Alcoholics, IV drug users and people who are homeless

Symptoms

- A person with **TB infection** will have no symptoms.
- A person with **TB disease** may have any, all or none of the following symptoms:
    - A cough that will not go away
    - Feeling tired all the time
    - Weight loss
    - Loss of appetite
    - Fever
    - Coughing up blood
    - Night sweats

Counseling Notes

The TB skin test is a way to find out if a person has TB infection.
If the person has TB infection, they will test for TB disease. Tests for TB disease include a chest X-ray and a test of the person's mucus.
Treatment for TB depends on whether a person has TB disease or only TB infection. If a doctor decides a person with TB infection should have preventive therapy, the usual prescription is a daily dose of the medication INH, taken for six to nine months. TB disease is treated with a combination of drugs, which may include a hospital stay. After a few weeks of treatment, most people can return to normal activities and not have to worry about infecting others. They will need to continue taking daily medication for up to nine months.

Immunization of babies shortly after birth with BCG vaccine can protect against severe forms of TB such as TB meningitis and disseminated TB in children less than five years old.

Resource Section

www.mayoclinic.org **(Mayo Clinic)**

Under "Find Diseases & Conditions" look for "Tuberculosis"

Ulcerative Colitis

See Inflammatory Bowel Disease.

Ulcers (Stomach and Intestinal)

See Risk 342 – Gastrointestinal Disorders

Description

A stomach or intestinal (duodenal) ulcer is a sore on the lining of the stomach or duodenum, which is the beginning of the small intestine.

Causes

- Bacterial infection (*H.pylori*) – The majority of ulcers are caused by these bacteria.
- Long-term use of nonsteroidal anti-inflammatory agents (NSAIDs), like aspirin and ibuprofen.
- In a few cases, cancerous tumors in the stomach or pancreas can cause ulcers.
- Peptic ulcers are not caused by stress or eating spicy food, but these can make ulcers worse.

Symptoms

- Abdominal discomfort is the most common symptom. This discomfort usually is a dull, gnawing ache that:
    - Comes and goes for several days or weeks
    - Occurs 2 to 3 hours after a meal
    - Occurs in the middle of the night (when the stomach is empty)
    - Is relieved by eating
    - Is relieved by antacid medications
- Other symptoms include weight loss, poor appetite, bloating, burping, nausea, and vomiting.

Counseling Notes

- Drugs such as antacids and others provide relief of ulcer symptoms.
- Avoid stress, spicy food, smoking, and excess alcohol consumption.

Resource Section

www.niddk.nih.gov **(National Institute of Diabetes & Digestive & Kidney Diseases)**

- Click on "Health Topics/Digestive"
- Scroll down to " Digestive Diseases Topics"
- Click on "Peptic Ulcers"

Vitamin A Excess – Congenital Birth Defects

See Risk 339 – History of a Birth with a Congenital Birth Defect

Description

Women who take large doses of vitamin A around the time of conception or early in their pregnancy have a high risk of delivering infants with birth defects.

Vitamin A excess can lead to:

- Cleft palate
- Cleft lip
- Cranial anomalies
- Eye defects
- Hydrocephalus
- Spina bifida

Causes

Women consuming large amounts of vitamin A from food, vitamin supplements, or medications have a 2 – 4 times greater risk of delivering children with craniofacial defects than did women with lower vitamin A intake.

Counseling Notes

- Women who may become pregnant should avoid the acne medication Accutane and other retinoid medications.
- Pregnant women should not take more than 5,000 IU of preformed vitamin A in vitamin supplements or fortified breakfast cereals.

Resource Section

www.medlineplus.gov (Medline Plus)

- Click on "Medical Encyclopedia"
- Look for "Hypervitaminosis A"

Zinc Deficiency Related Congenital Birth Defects

See Risk 339 – History of a Birth with a Congenital Birth Defect

Description

Zinc plays an essential role in the development of the fetus, constructing cells and DNA as well as boosting the immune system of the pregnant woman. Zinc deficiency is thought one cause of:

- Fetal growth retardation
- Premature delivery, labor and delivery complications
- Congenital anomalies of the infant

Counseling Notes

- Zinc is important during pregnancy for two reasons:
    - Proper growth
    - For developing a healthy immune system for the baby
- Red meat (beef), pork, dark meat of chicken and turkey provide the majority of zinc in the American diet.
- Other good food sources include oysters, fortified breakfast cereals, and dairy products.

Resource Section

www.ods.od.nih.gov **(National Institutes of Health)**

- Click on "Health Information"
- Click on "Supplemental Fact Sheets"
- Click on "Zinc" and select fact sheet for consumers or health professionals

References

Information in this document was compiled from the websites of the following organizations:

American Lung Association
Centers for Disease Control and Prevention
Epilepsy Foundation Health A to Z
Linus Pauling Institute at Oregon State University
Mayo Clinic Medicine Net Medline Plus
National Institute of Diabetes & Digestive & Kidney Diseases
National Institutes of Health