



# Postpartum Module

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## Introduction

Welcome to the Postpartum Module presented by the Minnesota Department of Health, WIC program.

## Training Objectives

After viewing the module, you will have a better understanding of the basics of postpartum care for WIC participants.

### Topics Include:

- Self-care basics
- Common postpartum concerns
- Getting a well-balanced diet
- Weight loss and exercise
- Supplemental vitamin needs
- Folic acid and iodine
- Anemia and iron
- Other considerations including child spacing recommendations.

## What is the Postpartum Period?

The postpartum period is defined by the completion of pregnancy and return to a non-pregnant state. Typically, this is six to eight weeks after delivery or termination of pregnancy. This period is a time of adjustment for an individual whose physical, medical, and emotional status experienced a significant change. Because each person's experience is different, it is important to be considerate of the individual needs of each postpartum participant and conscious of cultural practices surrounding childbirth.

Participants who are breast/chestfeeding can receive WIC services for up to 1 year after delivery. Participants who are not breast/chestfeeding or have experienced a miscarriage or a fetal or neonatal loss can receive services for up to 6 months following delivery or loss.

Most often common needs during the postpartum period are related to self-care. However, the postpartum period may be more challenging for those who have had surgery, experienced a fetal or neonatal loss, have an infant in need of continued medical care and supervision, or have been diagnosed with postpartum depression (PPD).

Adequate education and support specific to each individual circumstance can help manage this life change into the postpartum period and beyond.

## **What are the Self-Care Basics?**

Let's get started with discussing basic self-care for the postpartum participant.

Basic self-care is essential to the health and recovery of the postpartum participant. No matter how birth occurred, whether naturally, via c-section or other medically induced delivery, the first six to eight weeks following are considered a time of recovery.

Basic self-care during the postpartum period includes eating a well-balanced diet, continuing recommended medications and vitamin supplementation, breast/chestfeeding, avoiding harmful substances, completing the post-partum visit with their healthcare provider, and getting adequate rest.

A body goes through many physiological changes throughout the pregnancy and requires time to return to a pre-pregnancy state. Educating participants on the basics of self-care during this recovery period may help them to feel supported and empower them to protect and improve their own health.

Support during the postpartum period is essential to the healing process; this includes acknowledging the emotional changes that can occur. Using participant-centered counseling can be a good tool. Examples include asking an open-ended question to elicit a response ("Tell me how you are feeling?"), engaging in active listening, and providing supportive reflections can help with identifying the participant's more specific needs and sources of support in their life ("Thank you for sharing your concerns! You are overwhelmed and tired. What family member or friend could you call to help?").

If sharing information or a resource is helpful, be sure to ask permission ("May I share with you some information on understanding baby behaviors?") Lastly, summarize what was discussed

and let the participant know they may call WIC or their healthcare provider if more support is needed.

## Common Postpartum Concerns

### Pain and Healing

Let's move on to talk about some common postpartum concerns.

We'll start with pain and healing. Generally, pain associated with the postpartum period may last anywhere from three to six weeks. However, the healing process will vary for each postpartum participant depending on the type of delivery and their birthing experience.

Some of the more common complaints of pain including back pain, headaches, and perineal pain, should resolve within the first few weeks. However, some pain associated with delivery may last a little longer, especially if the participant experienced a c-section or other surgery. Let the participant know if their pain persists, they should contact their health care provider right away, especially if it is affecting the ability to care for their self or the new baby.

For the breast/chest feeding participant, experiencing some discomfort is normal at the beginning of a nursing session. If the pain continues, they may remove baby from the breast/chest and try repositioning baby to get a better latch. If pain worsens or becomes persistent, refer them to an International Board-Certified Lactation Consultant (IBCLC) or Dedicated Breastfeeding Expert (DBE). If lactation support is not available at WIC, refer the participant to local lactation support services or their healthcare provider.

### Baby Blues vs Postpartum Depression

The emotional changes that occur after delivery vary with each individual. Some may report feeling sadness in the first few weeks after delivery, these feelings often called the "baby blues", are normal. However, if the feelings last longer than a few weeks or become severe, then the participant may be experiencing postpartum depression (PPD).

Some of the signs of PPD include extreme sadness, anger or guilt, little interest in baby or self, feeling disconnected from baby, having trouble focusing, eating, sleeping, or feeling like harming self or baby.

Using participant-centered counseling will help the participant to feel supported and comfortable in sharing their feelings openly. It may be helpful to ask who is available to help at home and discuss options for additional support as needed. Provide a referral, if support is accepted, or encourage the participant to speak to their healthcare provider.

## Dealing with Constipation

One common concern during the postpartum period is constipation. Medications, complication with surgery or hemorrhoids, or avoiding stooling due to associated pain from labor or delivery can all be factors that contribute to postpartum constipation. Additionally, hormonal changes meant to relax the intestinal muscles during labor can cause the digestive system to move very sluggishly during the initial postpartum period.

### Tips for Preventing and Easing Constipation:

- Eat healthy: eat a diet rich in fiber rich foods, whole grains, fresh fruits, and vegetables.
- Stay hydrated: try for eight-8-ounce glasses of water every day.
- Drink more fluids as needed: fluid intake may be increased when resuming physical activity and with breast/chestfeeding.
- Get moving: light physical movement such as walking can often help with gas and constipation issues.
- Be ready: be prepared to go to the bathroom as soon as you feel ready.
- Know your limits: pain from a C-section or episiotomy can make it difficult to move and use the bathroom. Talk to your healthcare provider if this is a concern.

When in doubt, if diet and exercise alone have not helped, it is always best to refer the participant to their healthcare provider.

## Getting a Well-Balanced Diet

### Healthy Eating

A diet rich in variety will help with getting many of the recommended vitamins and minerals needed to heal and stay energized in the postpartum period. In general, encourage aiming for 3 regular daily meals with healthy snacks as needed.

Eating a combination of whole grains, protein and iron rich foods, along with the recommended servings of fruits and vegetables each day can ease fatigue and aid in recovery. Getting the recommended servings of low-fat dairy or soy products each day is also beneficial for healing the body.

**Continue to the next page for an example of dietary recommendations**

### Dietary Recommendations:

Food Groups	Servings Sizes per Day	Examples of Serving Size
Beef, Pork, Fish, Poultry, Beans & Lentils, Nuts & Seeds	5 ½ ounce (oz)	1 oz meat; 1 egg; 1 tablespoon (tbs) nut butter; ¼ c beans; ½ oz nuts
Vegetables	2 ½ cups (c)	½ c cooked; 1 c raw vegetable, 2 c dark green or red/orange vegetable; 1 medium potato
Fruits	2 cups	½ c berries; 1 c cut fruit; 8 oz juice, ¼ c dried fruit; 1 medium fruit piece
Grains	6 oz (Include at least 3 whole grain choices)	1 slice bread; ½ c cooked pasta, rice, or oatmeal; 1 c dry cereal; 3 c popcorn; 1 small tortilla
Dairy or fortified Soy Beverage	3 cups	8 oz milk; 8 oz yogurt; 1 ½ oz hard cheese; 1/3 c shredded cheese; 2 c cottage cheese
Oils & Other Saturated Fats	5 teaspoons (tsp)	1 tsp margarine; 1 tsp oil; 1 tsp salad dressing or mayonnaise

### Decreased Appetite

It is not uncommon to have a low appetite for the first few weeks into the postpartum period, especially when taking pain medication after a C-section. A well-balanced diet will aid in the healing process, support healthy weight loss, and increase energy production in the body. Restricting dietary intake may place the postpartum individual at risk for critical nutrient deficiencies during the recovery period.

It is important to educate on ways to manage a decrease in appetite such as eating smaller meals throughout the day. Less focus should be made on a balanced diet during this time period. Encourage intake of nutrient-dense foods that contain essential vitamins and minerals along with dietary fiber from a variety of food sources.

### Examples of nutrient-dense foods:

- A variety of fruits and vegetables: choose fresh, frozen, canned, or dried, including 100% juice.
- Whole grain options: bread, rice, cereal, pasta.
- Low-fat dairy foods or alternatives: milk, yogurt, cheese, fortified soy beverage, or tofu.

- A variety of protein and iron rich foods: lean meats, poultry, legumes, nuts and seeds, or soy products.

When the participant's appetite improves, educate on resuming balance and regularity. Encourage eating regular daily meals. Generally, working up to an average of 1800-2200 calories per day is recommended for most women. However, calorie needs will increase slightly for those that are more physically active and/or breast/chestfeeding.

It is also important to ask about dietary restrictions during the postpartum period. Additional support and individualized education maybe benefit those following a cultural postpartum diet, experiencing a lack of appetite or limiting intake due to a desire to lose weight.

## Weight Loss

After baby arrives, the postpartum participant may retain some extra weight and fluids associated with pregnancy. This is normal! The priority should focus on healing and then slowly work to resume normal daily activities when ready.

If the participant is interested in discussing the topic of weight loss, it should be done so with sensitivity. The postpartum additional education contact may be an opportune time to discuss this. When having the conversation, be sure to allow the participant to take the lead and set realistic goals that will not overwhelm or add to an already busy plate.

Weight loss should not be the priority! Remind them that it took nine months to put this weight on and one can expect it will take a little time for it to come off. Additionally, they want to ensure their body is ready to begin a weight loss regime.

Recommendations for returning to one's pre-pregnancy weight are very general guidelines. Physical activity along with proper caloric intake will help with initial weight loss and maintenance of a healthy weight. Breast/chestfeeding can also help with burning extra calories and returning the uterus to its normal size more quickly.

It is typical to retain some of the weight gained during pregnancy. A study in *Obstetrics and Gynecology* on [Postpartum Weight Retention Risk Factors and Relationship to Obesity at One Year](#) found that "approximately 75% of women were heavier one year postpartum than they were pre-pregnancy".

Retaining excess weight gained during pregnancy may increase lifelong risks of chronic health conditions such as diabetes, hypertension, or heart disease. It can also increase risks of complications for future pregnancies such as preterm delivery, gestational diabetes, gestational hypertension, or delivery by cesarean section.

Once the weight loss journey starts, a 1–2-pound weight loss per week is a healthy expectation. Encourage the participant to take it slow; the goal is to achieve a healthy weight, and weight loss is most successful when done in small intervals.

## Exercise

The American Congress of Obstetricians & Gynecologist (ACOG) recommends a gradual return to former activities following the postpartum period. Exercise can help the postpartum participant lose weight, build muscle strength, boost energy, and release stress.

There is no one size fits all when it comes to the level of physical activity. In general, it is best practice to follow the recommendations of one's healthcare provider for resuming routine exercise. Simple low impact exercises such a walking or light housework can be done as soon as the participant feels ready.

Recommendations include getting at least 150 minutes (2 hours and 30 minutes) of moderate-intensity aerobic activity each week during the postpartum period. Aerobic activity can be spread throughout the week in small intervals as time allows to make it more manageable. Some examples of moderate-intense activity include brisk walking, slow running or jogging, swimming, bicycling, or heavy house cleaning. Including the family in any activity may make it more enjoyable.

Anything that the participant was comfortable doing before and during pregnancy is acceptable to continue in the postpartum period. Muscle strengthening activity is encouraged but keeping it light is the key. Use of light weights, resistance bands or body weight, or some heavy gardening or housework are great examples of easy but effective muscle strengthening activities.

## Supplemental Vitamin

A healthy balanced diet is the ideal way to get adequate vitamins and minerals throughout the day. Increased nutrient needs during pregnancy may make it difficult to get enough from diet alone. Most healthcare providers will recommend a prenatal vitamin supplement to ensure consistent intake of key nutrients throughout the pregnancy.

Nutrient needs during lactation differ from during pregnancy. Continued use of prenatal supplements during lactation may exceed needs for folic acid and iron. In the postpartum period, including while breast/chestfeeding, it is generally recommended to return to the multivitamin supplement taken prior to pregnancy.

Some participants may not be opened to taking vitamins in the postpartum period. You may hear participants say things like “I never take vitamins”, “I don’t think I need vitamins. I eat pretty healthy”, or “Vitamins are too expensive, and they are not covered by my insurance”. Sharing what you have learned about the benefits of taking multivitamins may help. Some multivitamins may be covered by insurance; encourage participants to check with their insurance carrier or healthcare provider for specific coverage.

In some situations, a participant may have specific increased nutrient needs. For example, if the participant has a medical condition, following a culturally specific diet, experiencing a severe loss of appetite, or breast/chestfeeding multiples. In addition, those following a vegan or vegetarian diet, may require supplementation of certain key vitamins and minerals, such as vitamin B12. Participants should seek guidance from a healthcare provider if they have questions regarding postpartum supplementation.

## **Anemia and Iron**

It is highly encouraged to continue daily intake of iron rich foods during the postpartum period. Getting a balance of iron, including heme and non-heme dietary sources, and vitamin supplementation, ensures adequate absorption into the bloodstream.

There is an average loss of 250 mg of iron during childbirth. Iron is essential for the production of hemoglobin which is needed in the delivery of oxygen throughout the body. Oxygen delivery is required for reactions that convert protein and fats into energy. Loss of iron can place the postpartum participant at risk for iron deficiency anemia.

WIC checks hemoglobin (hgb) levels at the postpartum appointment to screen for iron deficiency. While not a direct measure of iron status, the WIC hemoglobin screening can be a useful indicator of iron deficiency anemia. Postpartum hgb levels below 12.0 g/dl will trigger risk code 201, indicating a low hemoglobin. A hemoglobin level below 10.0 g/dl is considered a high-risk condition which requires a referral to the health care provider for diagnostic follow up. For both instances, education should be provided.

Symptoms of anemia include fatigue, headache, pale skin, and lightheadedness or dizziness. Postpartum anemia is associated with postpartum depression, a decrease in milk supply, and anemia in future pregnancies.

Participants continue to need a good source of iron beyond the postpartum period. This can help ensure future pregnancies begin with adequate stores of iron. Iron supplementation may also be recommended by one’s healthcare provider. Once deficient iron stores return to normal, non-lactating participants need about 18 mg iron each day. During lactation, the recommendation is less at 9-10 mg of iron per day.



Heme iron is more bioavailable and better absorbed than non-heme iron. Let's look at some of the sources. Heme iron rich foods include lean meats, poultry, eggs, and seafood. Non-heme iron sources include leafy greens, beans, nuts, dried fruits, and fortified breakfast cereal, pasta, and breads. Vitamin C has been found to enhance non-heme iron absorption in the body and aid in healing. Some Vitamin C rich foods include oranges, kiwi, strawberries, broccoli, tomato, green or red peppers, spinach, kale, and sweet potato.

For more information about anemia, review the [Iron Deficiency Anemia in Women and Children Module](#).

## Folic Acid

Folic acid is a B vitamin that is important for producing and repairing cells in the body, including DNA and red blood cells. Folic acid is a synthetic form of folate, found in fortified foods and multi-vitamins. Folate, its naturally occurring form, is found in some foods. Folate deficiency can lead to anemia due to the reduction of red blood cells being produced in the body.

Folic acid is especially critical for future pregnancies. It is important for the prevention of serious birth defects known as neural tube defects, these affect the developing baby's brain and spine. This type of defect develops early on in pregnancy (between the 17<sup>th</sup> and 30<sup>th</sup> day), often before a pregnancy is detected. Research has shown that taking folic acid and having a diet rich in folate interconceptionally can prevent up to 50% of neural tube defects.

Anyone capable of becoming pregnant is recommended to take 400-800 micrograms of folic acid each day to aid in cell building along with eating folate rich foods in their daily diet. The combination of folic acid and folate together leads to an increase in blood concentration levels in the body to protect against deficiency.

Folate can be found naturally in leafy greens vegetables, lentils and beans, citrus juices, and bananas. Folic acid is added to most prenatal vitamins. It can also be found in fortified breads, pasta, and some breakfast cereals. It may be difficult to obtain adequate folate from food sources alone, which is why recommendations encourage a vitamin supplement that contains folic acid in addition to daily dietary sources.

## Iodine

Iodine is a trace element that is naturally present in some foods and added to few others. Iodine is an essential component in the thyroid hormones. The absence of adequate iodine can cause a disruption in hormone regulation and lead to the development of goiters. Iodine deficiency during pregnancy can increase the risk of certain infant birth defects and cause permanent neurodevelopmental and cognitive deficits in the growing child.

The recommendation for participants over age 14 is 150 mcg of iodine each day. During pregnancy, these recommended amounts increase to 220 mcg per day. When lactating, the amounts increase further to 290 mcg per day to support the needs of the parent and baby.

Since iodine intake has decreased over several decades, the American Thyroid Association recommends that all who are planning to become pregnant and breast/chestfeed take a vitamin supplement with 150 micrograms of iodine daily. Sources of iodine include iodized table salt, canned tuna and pink salmon, dairy, and eggs.

## Other Considerations

Additional recommendations during the postpartum period include avoiding smoking or vaping, taking illicit drugs, or drinking alcohol, and limiting caffeine.

Caffeine, commonly found in coffee, tea, and soda, is a stimulant for the central nervous system meant to increase alertness. During breast/chestfeeding it is recommended to limit coffee to 300 milligrams (2-3 cups per day). Excessive intake of caffeine can lead to anxiety, dizziness, and insomnia. Caffeine in the recommended low to moderate amount usually does not adversely affect the baby.

Smoking or vaping is a health risk for the parent and poses a risk of secondhand smoke for their children and other household members. Tobacco inhalation is the leading cause of lung cancer in the US; and it is also leading to an increased risk of other respiratory cancers. Secondhand smoke increases the risk of sudden unexplained infant death syndrome (SUIDS), reoccurring ear infection, and severe respiratory illness. Vaping also poses a risk, leaving behind toxic metals and metalloids at levels likely to harm not only the person vaping but also those nearby.

If a participant chooses to continue smoking, discussion may include how to reduce the risks. Some tips include cutting back, smoking outside, always smoke away from others, wear a jacket that can be removed, and washing hands before returning to care for baby. Minnesota's free cessation program, [Quit Partner](#), is a great resource to help parents with smoking cessation.

Avoid consuming alcohol or engaging in any substance use, especially if breast/chestfeeding. Drugs and alcohol both pass into breastmilk and then on to the baby. Additionally, it is difficult to care for the new baby when altered by any drug or alcohol. The American Academy of Pediatrics (AAP) encourages abstinence from substance use while pregnant or breast/chestfeeding.

If a participant shares that they are smoking, drinking alcohol, or using other substances, this is an opportunity for further discussion, to share risks and recommendations, and to encourage

them to speak to their healthcare provider. Be aware of resources available in your area to refer participants for additional support.

## Child Spacing or Inter-Pregnancy Interval

Inter-conception is the time following delivery and up to 12-18 months after birth. Inter-pregnancy interval is defined as the time between the date of a live birth and a subsequent pregnancy.

The Center for Disease Control and Prevention (CDC) recommends spacing out each new childbirth by 2 years or [1,000 Days](#). Waiting at least 18 months before a new pregnancy begins, allows the body time to heal from the previous pregnancy and supports a healthy environment for the developing baby.

Short intervals between births can lead to adverse outcomes including a reduction in breast/chest feeding duration, low infant birth weight, premature birth, small for gestational age births, and infant mortality. Parents should be advised to discuss reproductive life planning and contraceptive options during the inter-conception and inter-pregnancy intervals with their healthcare provider.

## Postpartum Wrap Up

Thank you for taking the time to view the postpartum module.

A few considerations to take away:

- Healthy nutrition and multi-vitamin intake aid in postpartum healing.
- Some pain in the PP period is normal; provide a referral when it seems like it is not.
- Weight loss can be a sensitive topic; allow participants to guide the conversation.
- Constipation and loss of appetite are common postpartum concerns.
- Baby blues can be normal, but postpartum depression (PPD) requires further attention.
- Child spacing is important for the health of future pregnancies.
- Breast/chestfeeding assist with maintaining a healthy weight and long-term health benefits for parent and baby.

**Continue to the next page for the Final Skills Check!**

## Final Skills Check

### Check your knowledge:

**Question 1:** The recommended iodine intake for ALL those of childbearing age.

- A: 220 micrograms
- B: 250 micrograms
- C: 110 micrograms
- D: 150 micrograms

**Question 2:** The basics of postpartum care include?

- A: Attempting a well-balanced diet, no vitamins, running around, then crashing.
- B: Sleeping all day long, eating only sweets, and taking vitamins.
- C: Getting a well-balanced diet, daily multi-vitamin intake, breast/chestfeeding, getting rest.
- D: Taking prenatal vitamins, drinking soda, and sitting around.

**Question 3:** WIC Postpartum Anemia is defined as a hemoglobin level at 12.0 g/dL? (T/F)

**Question 4:** Signs of Postpartum Depression (PPD) include?

- A: Extreme nausea, vomiting, diarrhea.
- B: Extreme sadness, anger or guilt, little interest in baby or self.
- C: Feeling connected to baby, focused, and well rested.
- D: Feeling like running away and hiding in a field.

**Question 5:** Match to Source: 1. Sources of Folic Acid, 2. Sources of Iron, 3. Sources of Iodine, 4. Sources of Fiber (mix and match)

- A: iodized table salt, canned tuna, or salmon, dairy, or some grains
- B: fortified breads and pastas, and some breakfast cereals
- C: whole grains, fruits, and vegetables
- D: lean meats, eggs, nuts and seeds, leafy greens

**Question 6:** What is the postpartum period?

- A: When an individual moves from pregnant to a non-pregnant state.
- B: When a participant gets pregnant a second time.
- C: Only when a parent is breastfeeding.
- D: Only immediately after a baby is born.

### [Training Module Answer Keys](#)

## References- Complete Listing of Hyperlinks:

[Postpartum Weight Retention Risk Factors and Relationship to Obesity at One Year](https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4286308/#:~:text=At%201%20year%20postpartum%2C%202.7,001)

(<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4286308/#:~:text=At%201%20year%20postpartum%2C%202.7,001>)

[Iron Deficiency Anemia in Women and Children Module](https://www.health.state.mn.us/training/cfh/wic/nutrition/modules/mod5irondef/index.html)

(<https://www.health.state.mn.us/training/cfh/wic/nutrition/modules/mod5irondef/index.html>)

[Quit Partner](https://www.quitpartnermn.com/) (<https://www.quitpartnermn.com/>)

[1,000 Days](https://thousanddays.org/) (<https://thousanddays.org/>)

[Training Module Answer Keys](https://www.health.state.mn.us/people/wic/localagency/training/nutrition/nst/answerkeys.html)

(<https://www.health.state.mn.us/people/wic/localagency/training/nutrition/nst/answerkeys.html>)

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