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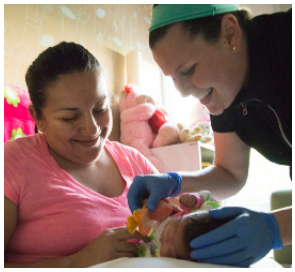
NICU Parent Packet

For families of babies in the Neonatal Intensive Care Unit at UW Medical Center - Montlake



First Edition April 2021

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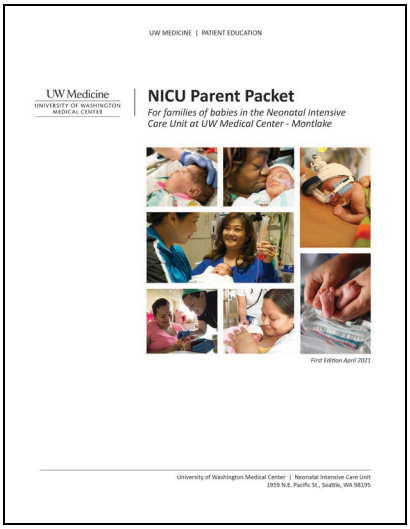
NICU Parent Packet

Purpose and contents

About this Packet

We have created this packet to help you:

- Care for and bond with your baby while in the NICU
- Learn how your baby might communicate with you
- Learn how to keep your baby comfortable, calm, and ready to grow
- Know how to support your baby's development while in the NICU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This "NICU Parent Packet" is written to help you understand and be part of your baby's care in the NICU.

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Questions?

If there is something you do not understand, please ask questions. Every question you ask is important!

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Therapy in the NICU

Working with you to help your baby develop

Who provides therapy in the NICU?

Therapists in the NICU have special training in working with newborns. They are physical, occupational, and speech therapists who are experts in how babies develop. They work with premature babies and infants who have high medical needs.

Therapists in the NICU are experts in caring for newborns.

NICU therapists are also called Developmental or Neonatal Therapists. They work with the rest of the medical team to support your baby's development. (See chapter 3, "Developmental Care in the NICU.")

The NICU Therapy Team at UWMC includes:

- **Neuromotor therapists** who have special training in helping preterm and medically fragile infants develop their sensory and motor skills
- **Feeding therapists** who have special training in helping newborns and medically fragile infants learn to safely eat by breast or bottle

What happens during a therapy session?

Our Therapy Team will get to know your baby within the first few days they are in the NICU. We will start therapy sessions while your baby is still very young. Our goal in each therapy session is to give your baby experiences that will help them learn and develop.

These early sessions may focus on:

- Calming baby during caregiving times
- Positioning them to support their development

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- Very gentle movement

As your baby matures:

- Therapy sessions will slowly include more advanced sensory and motor activities.
- We will look at your baby's "pre-feeding" skills. These are early skills that a baby learns before they start eating by mouth.
- When your baby shows they are ready to start eating by mouth, we will assess their sucking and swallowing skills. These first feedings can be at breast, with a bottle, or a mix of both.

At all times during the NICU stay, we will customize your baby's therapy sessions to best support their needs. These sessions will continue until your baby is ready to go home.

We invite parents to take part in therapy sessions. If you have not yet met a NICU therapist, ask your baby's nurse to introduce you. Therapists are in the NICU every day.

How can I take part in my baby's therapy?

When you take part in therapy sessions with your baby, the NICU therapists will help you:

- Understand how being in the NICU affects your baby's development.
- Learn how to support your baby's growth and development.
- Know what cues your baby uses and what they mean. Therapists will support you as you learn to respond to these cues and build a strong relationship with your baby.
- Touch and interact with your baby in ways that help your baby stay calm, relaxed, and ready for positive learning.
- Know how to support your baby learn to suck, swallow, and breathe while they are eating.
- Know how to support your baby's brain and body development during their NICU stay and over their first years of life.

Questions?

If there is something you do not understand, please ask questions. Every question you ask is important!

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Getting to Know Your Baby in the NICU

Early stages of neurodevelopment

What is neurodevelopment?

Neurodevelopment includes all the learning your baby is doing! Your NICU *developmental therapists* are experts in knowing how babies learn. Our job is to provide the kind of care that will best help your baby's brain develop.

Your baby's brain and body are growing very quickly now. We will do all we can to support your baby's learning in this early stage of growth.

How does a baby learn?

Babies learn when they move their body, sense the world around them, and interact with people and objects. New activities cause the *neurons* (nerve cells) in their brain to form new connections called *synapses*. As these synapses form, it helps a baby understand the world around them.

We want to help your baby's brain form lots of strong synapses during their time in the NICU! This early stage of learning is very important. What they learn now can affect their development long after they leave the hospital.

What does my baby need?

A baby needs to be calm to learn. Just like us, your baby cannot learn when they feel overwhelmed or stressed.

During therapy sessions, we will help your baby have a positive learning experience. We want your baby to enjoy their sessions. We will also help your baby practice the coping skills and movements that will help them calm themselves. This will help their development.

Babies learn best when they are calm and well-rested.

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Babies actually form the most synapses while they are sleeping. This is because their brains are processing what happened just before they fell asleep.

When we provide the right experiences for your baby and then let them sleep soundly between care times, we are helping their neurodevelopment. We call this "sleep protection."

How can I help my baby learn?

You can help your baby learn by helping them feel calm and by protecting their sleep time. As you get to know your baby, you will learn their *cues* that tell you when they are feeling overwhelmed or tired. You will also be able to tell when your baby is ready to interact and learn more.

How can I tell what my baby needs?

Your baby is always trying to tell you something! Babies communicate through their *state* and their *behavior cues*. Learning your baby's states and cues will help you support them during their NICU stay and after you take them home.

Quiet sleep

Active sleep

States

A state is a level of alertness. This table shows the 6 alertness states in newborns:

State	How It Looks	What to Do
Quiet Sleep	*Baby's eyes are shut and still. Their breathing is regular. They do not move much. They may startle or move their mouth.*	A lot of a development happens during quiet sleep. Unless it is time to give a baby important medical care, it is best to let them sleep.
Active Sleep	*Baby's eyes are closed, but you can see their eyes moving slowly beneath their eyelids. The baby may open their eyes briefly, have some changes in breathing, or move their mouth as if they are sucking. A baby may also twitch, move, or stretch.*	A lot of development happens during active sleep, too. Help your baby stay asleep unless it is a care time.

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Drowsy

Quiet alert

Active alert

Crying

State	How It Looks	What to Do
Drowsy	*Babies open and close their eyes but do not focus on anything. Their eyelids seem heavy, as if it is hard to keep them open. Breathing is faster and shallower than in the sleep states, and the baby moves more. There is often a delayed response to voices and other noises.*	It is best to help your baby stay calm and limit how much stimulation we are giving. Carefully follow any cues your baby gives about what they want to do next. They may be waking up or they may want to return to a deeper sleep.
Quiet Alert	*Baby's eyes are open, bright, and focusing. The baby may gaze toward you, but will not move their body much. Their breathing is regular and calm.*	This is a good time to interact with your baby. If they get drowsy or show any stress cues, help them stay calm and interact less.
Active Alert	*Baby's eyes are usually open. When they move, they may also grimace, move and stretch frantically, or show other stress cues.*	Baby is awake and trying to calm themselves. They are not yet ready to engage. Help your baby calm before you add more stimulus.
Crying	*Baby is actively crying. Movements are frantic. You may see changes in breathing, heart rate, and blood pressure.*	When your baby is crying, they need your help to calm. For tips on how to do this, see "Helping Your Baby Calm" on page 5.

Behavior Cues

Behavior cues are ways your baby shows us how they are feeling and coping with the world around them. Their vital signs are one of the cues they give us. Vital signs include heart and breathing rate, blood oxygen levels, and the color of their skin.

Cues are very important. You may hear us say that we are doing "cue-based care." This means we are respecting and responding to your baby's behaviors. We use them to help guide your baby's care.

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Cues that Your Baby Is Stable and Ready to Interact

- **Baby seems comfortable.** Their eyes may be open or closed. Their body and face are relaxed. If their eyes are open, your baby may turn toward your voice or look at you.
- **Calm motion.** Your baby may try to move their hands together or toward their mouth, or tuck their legs up to their tummy. They may be rooting, mouthing, or sucking.
- **Vital signs are stable.** Their breathing, heart rate, and blood oxygen levels (saturation) are stable. Their skin is a healthy color.

Cues that Your Baby Is Under Stress and Needs Help to Calm

A baby who was relaxed and calm may show these cues if they start to feel stress:

- They may change their facial expression to look mad, sad, surprised, or worried.
- They may look away, start to stare, or close their eyes.
- They may show you the "stop sign" by splaying fingers apart and placing their hand over their face or stretching out their arm.
- They may show startles, jerks, or jittery movements.
- They may begin to move frantically, or strongly push arms/legs away from their body or arch backward
- They may begin to yawn, hiccup, grunt, gag, or even vomit
- They may begin to show changes in vital signs (breathing, heart rate, saturations, color)

If you see these cues, it's a good idea to stop what you are doing. Try less interaction and fewer stimuli. Help your baby calm and recover.

How can I help my baby calm?

Take a step back and observe all the *sensory stimuli* in the room. These include sounds, sights, touch, and movement. Each stimulus requires the brain to process it and respond to it.

A baby cannot process all of this stimulation the way that we can. Often, things that seem very simple to us can be overwhelming to baby. This is the source of a lot of stress for babies in the NICU. Stress can interfere with a baby's learning and development.

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Tips to Help Your Baby Calm

- **Plan all interactions to happen at the same time as your baby's care times.** This is called *clustering* cares. We do this so your baby will have long rest times and use their energy to grow. It also gives their brain time to process all they have learned before falling asleep. Waking up a baby when they are asleep can delay their healing and development. It is important to let your baby sleep between care times.
- **Start all interactions slowly and gently.** This includes how you use your voice, your hands, and how you give baby care. Greet your baby softly to begin the care time. Keep watching for your baby's cues and adjust your activity to meet their needs.
- **Try to introduce one sense *(touch, movement, smell, taste, sound, and sight)* at a time.** Remember that your baby is trying to process everything they sense. By doing one thing at a time, it gives your baby time to respond, and to tell you if a stimulus is too much to process. For example:
  - Start by talking softly to your baby.
  - Watch your baby's response, then add a gentle, still touch of your hand.
  - Pause and give your baby time to respond before doing anything else.
- **Provide 2-person cares.** This means that one person does the care activity, such as changing a diaper or taking your baby's temperature, while the other person is helping your baby stay calm.
- **Pay attention to what your baby seems to enjoy, and what causes them stress.** This is not the same as what is enjoyable or stressful for you. Let your baby's state and behavior cues guide you. Your baby may act more engaged one care time, and more sensitive the next. This is normal. It reminds us to watch baby's cues every time we interact with them. They will tell us what is working and what isn't. Keep taking note of your baby's response each moment and help support a calm state. Your baby's likes and dislikes will also change as they grow and their medical needs change.

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- **Watch for your baby's cues about when to end your interaction.** Even when it seems like your baby loves your time together, it takes a lot of energy for them to stay engaged. Always follow their cues when you interact. Watch your baby for signs of stress or getting tired. You can help baby fall asleep in a comfortable position when they show you cues that they are done.

Medical Tests and Procedures

While your baby is in the NICU, they may need tests and medical procedures to help us care for their health. Some of these procedures may be stressful, uncomfortable, or painful. At these times, your baby is likely to give stress cues (see page 4 of this chapter). We will do our best to lessen the stress on your baby.

Often, you can help comfort your baby before, during, and after the procedure. But there may be times when this will not be possible.

Things You Can Do

Here are some things that can help your baby feel less stress before, during, and after a procedure. Always ask your baby's nurse if it is OK to do these things. There will be times when it is not possible.

You may be able to:

- Give your baby tastes of breast milk or sucrose before the procedure
- Hold your baby during the procedure
- Cover or shade your baby's eyes from bright lights
- Talk to your baby, using a soft voice and speaking slowly and calmly
- Swaddle your baby into a comfortable, tucked position or give your baby *containment* (see the chapter "Developmental Care in the NICU")
- Help your baby suck on a pacifier or their hands

After the procedure, hold your baby swaddled or skin to skin. If you cannot hold your baby right away, give your baby a comforting touch in the crib for a few minutes. Do this until your baby is calm and seems comfortable.

Questions?

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Developmental Care in the NICU

How you can help

What is developmental care?

Providing *developmental care* for your baby means caring for your baby based on their current age, abilities, and stage of development.

Age

The age of a baby can give us an idea of what they are able to do. Their age tells us how much time their brain has had to develop. Younger babies need more help from us to protect them from the stimulation in the NICU. As babies grow, they often need less help, and they are more ready to interact with us.

Abilities

When we talk about a baby's abilities, we are talking about what baby can do **right now**. Abilities are not based only on a baby's age. They can be affected by a baby's medical needs and by being in the NICU. We can assess your baby's abilities by closely watching their state and cues when we interact with them.

Stage of Development

Together, your baby's age and abilities help us know their current *stage of development*. This tells how they will best learn during this time. Your baby's stage of development helps us know how to best interact with them. (See "Stages of Development" on page 3.)

We use your baby's stage of development to guide their care.

What does my baby like?

All babies are unique. We will go into more detail about what we expect of babies at different ages and stages in the next section. But there are some things that most babies like while they are in the NICU, no matter what their age or stage.

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Your baby likes YOU.

Your baby already knows you. They know your smell, your voice, and will soon know your touch. Your presence is like medicine for your baby. Your baby will have a preference for you from their very first day. YOU are the most important caregiver for your baby.

Even though your baby knows and likes you, it is important to learn your baby's cues to find out how they like to be touched and held. Watch your baby respond. Be slow, calm, and steady.

Your baby likes kangaroo care.

You are the only one who touches your baby skin-to-skin. Doing this helps with bonding, healing, and milk production. One of the best ways to touch baby skin-to-skin is called *kangaroo care*.

During kangaroo care, your baby lies on your chest, skin-to-skin. In this position, baby can hear your heartbeat, smell your unique scent, and get the benefits of skin contact. This is the best way for baby to feel close and connected to you. It is also important for your baby's health.

Babies can have kangaroo care when they are very little, even if they have a breathing tube. But, being moved out of the crib takes a lot of energy for baby. Your baby's medical team will make sure that your baby is ready and able before we take them out of the crib to be held by you.

Talk with your nurse about when your baby might be ready to start kangaroo care.

Your baby likes comforting, positive touch.

Your baby's skin is still developing. It can be very sensitive, so we need to use comforting, positive touch. Here are the best ways to touch your baby at this stage:

- **Still touch:** Keep your hands still when you touch your baby. Stroking or massaging can be too stimulating. It can even be painful for your baby.
- **Containment:** *Containment* means gently helping bring your baby's body into a fetal position. This will help baby feel calm, safe, and secure. The goal is to help your baby feel comfort but not feel restrained. The more contact between your hands and their body, the more calming it will feel for your baby.

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You can also use blankets or positioning devices to contain your baby into a nice tucked position in the crib. Being tucked in, surrounded by boundaries, will help your baby fall asleep faster, remain calm, and stay asleep longer.

- **Boundaries:** Babies who move their arms and legs all around are often looking for boundaries or "walls" to push against. Gently use your hands to allow them to push into you, and then guide them back toward a fetal position to help them calm.
- **Grasping:** Place your finger into your baby's open hand when they are reaching. Help bring their hands back to the center of their chest or near their mouth.

Stages of Development

Premature babies or babies who have medical problems go through three major stages of development during their time in the NICU. These stages are:

- Sensitive/Protective Stage
- Supported Engagement Stage
- Engaging/Interactive Stage

Your baby's therapist will help you understand which stage your baby is in right now. Remember, whatever stage your baby is in, we want to help your baby enjoy the experiences we give them. When babies are in a calm state, they are able to learn from these interactions. We want to get their development off to the best start!

Stage 1: Sensitive/Protective

A baby in this stage is not ready for much interaction. Their bodies are not yet ready to move against gravity. Their sense of touch, movement, taste, and smell are taking in information, but are still immature. They cannot see much yet and their eyes are sensitive to light. Their sense of hearing is starting to develop, and you may see them respond to your whispered voice. Most lights, sounds, and touch may be stressful. Baby may avoid interactions by "shutting down" or falling asleep. This is one of the stress cues we see a lot in this stage.

Our job during this stage is to reduce stress for your baby, and help them remain calm. This will help to protect their sensory systems.

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We can do this through 2-person cares, comforting touch, dimming lights, being very quiet, using our hands or positioning supports to tuck your baby into the fetal position, giving tastes of breast milk, or providing kangaroo care whenever baby is able. We should not ask your baby to engage with us much during this stage.

Here are some activities that your baby may be ready for:

Smell

- Give your baby's nurse a cloth that smells like mom to place into crib with your baby.
- Do **not** wear scented lotions or perfumes.
- Do **not** allow the smell of cleaners or alcohol wipes to enter your baby's incubator.

Touch

- Give your baby as much kangaroo care as you can, with both parents.
- Help give your baby containment during 2-person cares.
- When your baby is more stable, give them about 10 to 15 minutes of positive touch each care time (see pages 2 and 3).

Hearing

- Have quiet conversations (whisper) near bedside and during care activities.
- Do **not** play recorded music or recorded voices for baby yet.
- Read, sing, or talk to your baby (whispers or quiet conversation) for 5 to 10 minutes at a time.

Moving/Body Awareness

- During a care time, and between cares, let your baby stretch and move. Use your hand as a boundary for your baby to move against, and help them stay calm while moving.
- As your baby relaxes, gently help them back to a tucked position. Watch your baby's cues to make sure the movement isn't too overwhelming for them.
- Do this as your baby tolerates it. It may be only once a day or with each care time.

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Vision

- As much as you can, keep the bed space dark.
- Cover your baby's eyes whenever lights are on in the room.

Stage 2: Supported Engagement

A baby in this stage will start engaging with us more and more during care times. Your baby's body is getting stronger and will start moving more. Their sense of touch, movement, smell, taste, and hearing still need to mature. Their sense of vision is still not ready for stimulation.

During this stage, your baby will still need support to stay calm. Bright lights, sounds, and touch can still be overwhelming, so you will likely see some stress cues from your baby. We need to closely watch for cues that tell us whether your baby wants to continue or to stop the interaction.

At this stage, your baby may be ready for:

Smell

- Place a cloth that smells like mom into your baby's crib.
- Give your baby as much kangaroo care as you can, with both parents.
- Do **not** wear scented lotions or perfumes.

Touch

- Give your baby as much kangaroo care as you can, with both parents.
- Help give baby containment during 2-person cares.
- Baby may tolerate positive touch (see pages 2 and 3).
- Ask the physical therapist (PT) if your baby would tolerate "neonatal massage" once a day. Please note that neonatal massage is different than infant massage, which is only for older babies.

Hearing

- Whisper or talk very softly.
- Read, sing, or talk 15 to 30 minutes at each care time, or when baby shows engagement cues.

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- When you cannot be with your baby, play soft music or your soft recorded voice for 5 to 10 minutes at a time.

Moving/Body Awareness

- Each care time, help your baby out of their swaddle to stretch and move their body. Use your hands to keep baby calm, then return them to a tucked position.
- Your baby may like being held and gently rocked for a few minutes.

Vision

- Start introducing soft background light to your baby.
- Turn the soft light on for 12 hours during the day, with 12 hours of dark during the night.
- Avoid bright or direct lights. Shade your baby's eyes if bright lights are on in the room.

Stage 3: Engaging/Interactive Stage

As your baby grows, they will have learned more skills to stay calm and interact with the world around them. You may see fewer signs of stress, and more signs of engagement. Your baby's body is stronger and able to move more. All of their senses are taking in and processing information.

A baby in this stage will most likely enjoy interacting with you. They will still prefer gentle touch, eye contact, movement, and soft noise and light.

Even in this stage of development, your baby still needs your help! Look for ways you can keep your baby calm and engaged with you. Babies may not yet have much energy to interact for very long. We want to continue to help baby to sleep between care times.

At this stage, your baby may be ready for:

Smell

- Hold your baby close to your body, as often as you can.

Touch

- Your baby may tolerate more positive touch (see pages 2 and 3).
- Keep giving your baby neonatal massage, as tolerated.

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Hearing

- Still talk softly or keep your voice to a whisper.
- Your baby may tolerate a lot of positive sound each day in short sessions. Try reading, singing, or talking.
- When you cannot be with your baby, play soft music or your soft recorded voice for 5 to 10 minutes.

Moving/Body Awareness

- Each care time, help your baby out of their swaddle to stretch and move their body. Use your hands to keep baby calm and return to a tucked position.
- Begin picking up your baby and holding them while gently rocking.

Vision

- Keep providing soft background light for your baby. Avoid bright or direct lights.
- Turn the soft light on for 12 hours during the day, with 12 hours of dark during the night.
- Help your baby wake up and try to focus on you. As they reach their due date, your baby will be able to see you from about 12 to 18 inches away.

Musculoskeletal Development

The *musculoskeletal system* is made up of all of baby's bones, muscles, and ligaments. Bones, muscles, and ligaments must be in the right alignment to allow a baby to move and grow properly.

We will support your baby's musculoskeletal system during all stages of their development.

Positioning Your Baby in the NICU

While your baby is in the NICU, we will position them in a variety of ways to help support their development and shape their head. To do this, we will use support devices such as blankets, rolls, and positioners. It is safe to use these devices because our nurses and monitors watch over your baby 24 hours a day, keeping track of your baby's vital signs.

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These support devices wil:

- Help your baby's posture and alignment
- Let your baby sleep in different positions

Positioning for Development

To help development, we will position your baby in a position that is similar to how they were in the womb. To hold this fetal position, we will help your baby:

- Bring their hands together at their chest
- Tuck their hips to make a long, rounded spine, knees gently bent toward stomach
- Keep their head in midline relative to their body

We will change your baby's position often to help give their body different experiences. We will use different positioning supports and swaddling to help your baby stay in the best positions for their development.

As your baby gets stronger, they will be able to hold these postures better without help from positioning devices or blankets. Your baby's crib will then be a "safe sleep environment." This means your baby will lie on their back, alone in the crib, with no positioners or blankets.

Positioning for Head Shape

While in the NICU, your baby will spend a lot of time lying in a crib. This means that your baby's skull will be holding the weight of their head (weight bearing).

Preterm babies may not be able to move their head into different positions. This can be because it is hard to lift their head or because of their medical equipment. If your baby always lies in the same position, it can cause their head to look more flattened.

We want to help your baby's head become rounded. This is why we use positioning that helps your baby hold the weight of their head in different ways while they are sleeping.

Here are some common examples that we see in the NICU, and ways we can help correct the shaping of your baby's head.

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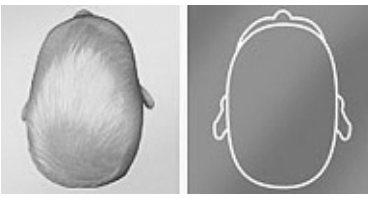
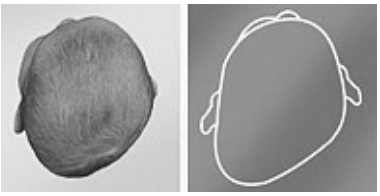
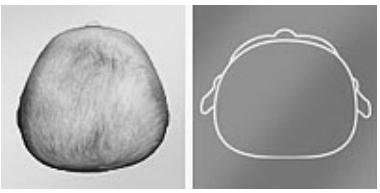


Dolicocephaly *can occur when babies lie too much with their head turned to each side. This is common after intubation.*



Plagiocephaly *can occur when a baby's head tends to stay tilted to one side. This baby spends time looking to the RIGHT, therefore flattening the RIGHT side of the back of the head.*



Brachycephaly *can occur when babies lie on their back a lot.*

Dolicocephaly

When a preterm baby lies on the sides of their head for long periods, it can flatten the skull on the sides. This is called *dolicocephaly*.

If your baby's head is flattened on the sides, we want to help your baby take more weight through the back of their head. To do this, we:

- Place your baby lying on their back, so your baby is looking up toward the ceiling during sleep
- Avoid letting your baby's head turn to either side for long periods

Plagiocephaly

When a preterm baby turns their head to one side a lot, their head can start to get flat on that side. This is called *plagiocephaly*.

If your baby's head is flat on one side, we want to help your baby sleep in the opposite direction and/or stay in the middle. To do this, we:

- Help your baby keep their head centered.
- Help your baby's head tilt to the other side more often

For example, in the image for plagiocephaly, the baby's head is flat on the right side. This baby needs help staying off their right side and practice tilting to their left side.

Brachycephaly

When preterm babies spend most of their time lying on their back, the back of their head may flatten. This is called *brachycephaly*.

If the back of your baby's head is flattened, we want to help your baby take weight through the sides of their head. To do this, we:

- Help your baby sleep on their side during the NICU
- Switch back and forth between right and left sides to even out the pressure

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Positioning at Home

Because you do not have monitors and 24-hour nurses at home:

- **It is NOT safe to place your baby on their side or tummy to sleep.** These positions can increase the risk of health problems, including *sudden infant death syndrome* (SIDS).
- The **ONLY** safe sleeping position for your baby is lying on their back, alone, in a crib.

If you have concerns about your baby's head shape as you get ready to take your baby home, please talk with a NICU therapist. We can help you make a good plan for baby at home.

Questions?

If there is something you do not understand, please ask questions. Every question you ask is important!

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Feeding Therapy in the NICU

Keeping your baby safe and interested in feeding

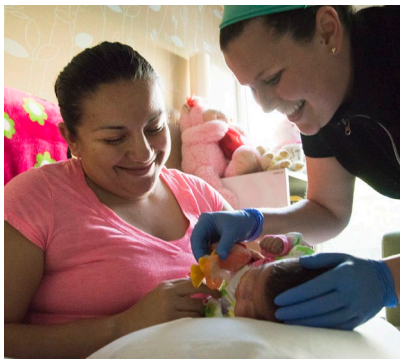
This handout explains how your baby progresses with both breastfeeding and bottle feeding.

How does a baby in the NICU "learn" to feed?

While your baby was in mom's belly, they swallowed *amniotic fluid* (the fluid inside the uterus). This helped them practice swallowing while still in the womb. Now that your baby is born, you can help them build on the skills they have already started to use.

What are pre-feeding activities?

Pre-feeding activities are things you can do with your baby before they are ready to eat by mouth. These activities help your baby get used to the smell, touch, taste, and feel of eating before they are actually breastfeeding or bottle feeding. You can do these activities even when your baby needs respiratory support. Pre-feeding activities should be done during care times. (See *clustering care* on page 5 of the chapter "Getting to Know Your Baby in the NICU.")



Pre-feeding activities help your baby prepare for feeding by breast or bottle.

Pre-feeding activities include:

- Keeping a *scent cloth* in your baby's bed. A scent cloth is a piece of material that smells like mom. (See the section on "Smell" on page 4 of the chapter "Developmental Care in the NICU.")
- Holding your baby skin-to-skin
- Holding your baby during tube feedings
- Giving oral care with breastmilk or sterile water
- Giving your baby a pacifier during care times or tube feedings
- Giving your baby tastes of milk on a pacifier or a clean finger
- Letting your baby "explore" at your breast, without eating

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When will my baby be ready to eat by mouth?

Your baby will begin to show signs when they are ready to eat. These signs are called *feeding cues*. (See "Behavior Cues" on page 3 of the chapter "Getting to Know Your Baby in the NICU.")

If babies are breathing well without respiratory support:

- They may start breastfeeding as early as 32 weeks of age.
- They may start bottle feeding as early as 33 to 34 weeks of age

Each baby is different and may start eating at different times. Your doctor may ask you to wait to feed your baby if your baby still needs breathing support, even if they are older than 32 to 34 weeks of age. If this occurs, you can keep doing pre-feeding activities with your baby.

Doctors sometimes allow babies to feed when they are on breathing support, if they are showing feeding cues and other signs that they are ready to eat. Nurses, lactation consultants, and feeding therapists will help you know when your baby is ready to eat by mouth.

To help your baby grow, we will keep feeding your baby with a feeding tube even after you start breastfeeding or bottle feeding. As your baby learns to feed, they won't need the feeding tube as much.

What do feeding cues look like?

When your baby is ready to eat, they may:

- Wake up before or during their care time
- Search for something to suck on, such as their hands, fingers, pacifier, or mom's breast
- Lick their lips or begin sucking

Breastfeeding in the NICU

Because your baby is in the NICU, they need support to breastfeed. Nurses, lactation consultants and feeding therapists will help you and your baby figure out the best position and breastmilk flow.

We have muscles around our head, neck, and mouth, just like other areas of the body. Babies in the NICU are still developing their muscle strength. This means they may need a nipple shield to help them stay latched to mom's nipple. As babies get stronger, they may not need the nipple shield to breastfeed.

Babies are also developing their ability to coordinate swallowing with breathing. Sometimes mom's breastmilk flows too fast for a baby to

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manage. There are ways that moms can slow their milk flow, to better match their baby's skills.

To help slow the flow of breastmilk:

- Use a nipple shield
- Lean back or lie on your side while feeding
- Pump some of the milk before feeding your baby
- Try *pacing* while breastfeeding:

  When pacing, you stop the flow of milk so your baby can breathe. To do this, remove your nipple from your baby's mouth and give them a break.

Bottle Feeding in the NICU

Babies can start bottle feeding between 33 and 34 weeks of age, if they are showing feeding cues. Nurses and speech pathologists will help you figure out which type of bottle works best for your baby.

If you have a specific bottle from home that you plan to use with your baby, please bring it to the hospital so we can make sure it is a good match. As babies learn to coordinate breathing and swallowing, we want to make sure that the milk flows at the right pace for them. If your bottle from home flows too fast, it may not be a good match for your baby at first. Your bottle might be used later, as your baby's feeding skills develop.

Here are some ways to help your baby feed safely while they are learning to eat from a bottle:

- **Use a side-lying position:** Place your baby on their side to bottle feed. This is similar to how you might hold your baby to breastfeed. When a baby is on their side, it helps slow the flow of milk and makes it easier for them to breathe while eating.
- **Reduce flow in the nipple:** Change to a different bottle nipple or fill the nipple only half full to help slow the milk flow. This makes it easier for your baby to coordinate. Some babies can handle a full nipple of milk, but others may not. Talk with your nurse and speech pathologist to find out what has worked best for your baby.
- **Try *pacing* while bottle feeding:** Tip the bottle down so no milk is in the bottle nipple, but do not take the nipple out of your baby's mouth. Pacing helps your baby stay organized. It also gives them a breathing break while feeding.

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What is my baby telling me about eating?

- Signs that your baby enjoys eating:
  - Relaxed face and body
  - Eyes may be open or closed
  - Easy breathing
  - Active, strong sucking
  - Regular swallowing
- Signs that your baby may be stressed while eating:
  - Grimacing
  - Arms or legs waving or kicking
  - Fingers splayed out like a “stop” sign
  - Milk spilling out of their mouth
  - Tense body or bearing down
  - Holding their breath
  - Gulping or other “squeaky” noises
  - Gagging
  - Pulling away from the breast or bottle
  - Changes in their heart rate or breathing pattern

What can I do if my baby is showing signs of stress?

- Make sure your baby is well-supported while you hold them. You can also swaddle your baby. This helps them organize their body and keep their arms and legs calm.
- Give your baby a pacifier before offering them your breast or a bottle. This helps them “warm up” and prepare for eating. It may also help lessen sensitivity in your baby’s mouth and keep them from gagging.
- Slow the flow of milk, either by changing the flow rate through the bottle or breast, or by pacing your baby.
- Provide burp breaks if your baby seems uncomfortable.

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Common Questions

Will using a pacifier interfere with my baby breastfeeding?

Using a pacifier helps your baby stay calm. It also saves their energy while they are in the NICU. Sucking on a pacifier is called *non-nutritive sucking*. It helps your baby get ready to breastfeed or bottle feed.

Will sucking on a pacifier make my baby too tired to breastfeed or bottle feed?

No. Non-nutritive sucking does not use as much energy as breastfeeding or bottle feeding. Sucking on a pacifier can also help organize your baby.

Can I ONLY breastfeed my baby?

This depends on you and your baby. Some things to consider:

- Can you be at the bedside throughout the day and night to offer your breast if your baby is awake and wanting to feed?
- How much milk do you have?
- How much does your baby need to grow?
- What are your baby's sucking and swallowing skills?

The NICU team will help you answer these questions.

If I start bottle feeding, will my baby still want to breastfeed?

Yes. Breastfeeding success is often related to:

- Introducing your baby to breastfeeding before bottle feeding
- Keeping up an adequate breastmilk supply
- Ongoing work with breastfeeding once home as baby matures

Breastfeeding helps bottle feeding and bottle feeding helps breastfeeding. Both ways of feeding help your baby build stamina and feeding skills that will improve their ability to breastfeed.

How do I know my baby is done eating?

When babies are getting too tired to feed, they will no longer look for the bottle or breast. Or, they may hold the nipple in their mouth without actively sucking. Your baby may purse their lips or push your nipple out with their tongue to tell you they are finished. Some babies need a "half time," where you allow them to rest for a few minutes to build up energy to complete their feed.

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A feed should not last longer than 30 minutes. Babies start using too much of their energy if they feed for more than a half hour at a time.

Is it OK to tap or twist the bottle to get my baby to keep eating?

No. Doing this triggers your baby's response system to suck, whether they are ready to swallow or not. Your baby may start sucking, but if they're not ready for milk, it could be stressful or cause choking.

When will my baby's feeding tube come out?

The feeding tube stays in while your baby is learning to eat. As your baby starts to breastfeed or bottle feed, the amount they eat will be subtracted from what goes in their feeding tube. Most times, the tube is removed a few days before a baby goes home.

Does the feeding tube keep my baby from learning to eat?

You may wonder what would happen if we stopped using the feeding tube. You might expect that being hungry would help your baby "learn to eat." But, most babies in the NICU don't have the energy and strength it takes to learn to eat on their own, even if they are hungry.

The feeding tube helps us meet your baby's nutritional needs while they are learning to feed. With good nutrition, your baby will build strength and stamina. When they are strong enough, they will be able to eat for themselves and will no longer need a feeding tube.

Will I have to feed my baby this way forever?

No. But while your baby builds their feeding skills, they will still need your help.

Your baby will go home feeding how they are eating in the NICU. Before you leave the NICU, the nurses, lactation consultants, and feeding therapists will make sure you are prepared to feed your baby at home. As your baby gets stronger, they won't need as much help coordinating their swallowing and breathing.

Over time, you will be able to feed your baby as you would a typical newborn. Keep watching your baby for any signs that you need to change their feeding plan.

Questions?

Your questions are important. Talk with your NICU doctor or nurse if you have questions or concerns.

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When You Take Your Baby Home

How to support their ongoing development

Starting life in the NICU has been hard work for you and for your newborn. Your baby has been learning so much and making a lot of brain connections during their stay here. They have made great progress. There is so much to celebrate now, as your family gets ready to go home!

Congratulations! Your baby is finally ready to leave the NICU and begin your new life together.

Your baby's development here in the NICU is the foundation that you will build on after you go home. Your baby's NICU therapists will help you plan a good routine for home that will support your baby's ongoing progress. We want to make sure your baby stays on track after they graduate from the NICU.

Developmental Screening

Remember that development is a process. As your baby grows, they are learning new skills that build on the things they have already learned. To make sure your baby is progressing, closely watch your baby's development during the first few years of life.

Babies who have spent time in the NICU should have a *developmental screening* within a few months after leaving the hospital. During this screening, a therapist will assess your baby's development, give you ideas for play activities, and help you decide if your baby will benefit from therapy services.

Some babies can use therapy support right away. Other babies can wait a few months before a developmental screening. Your NICU

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therapists will help you find therapy services near your home that can provide therapy services.

Positioning Your Baby for Sleep

Because you do not have monitors and 24-hour nurses at home:

- **It is NOT safe to place your baby on their side or tummy to sleep.** These positions can increase the risk of health problems, including sudden infant death syndrome (SIDS).
- The ONLY safe sleeping position for your baby is lying on their back, alone, in a crib.

If you have concerns about your baby's head shape as you get ready to take your baby home, please talk with a NICU therapist. We can help you make a good plan for baby at home.

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