



# Newborn Parenting

Andrea Tuttle MD, FAAP

General Pediatrician

Pensacola Pediatrics, P.A.

# DISCLOSURE

This class is for general educational purposes only.

We cannot diagnose medical conditions or discuss treatment plans for individuals.

If you have any concerns about you or your baby, please contact your pediatrician.

# WHAT WE WILL BE DISCUSSING TODAY:

## Part A: The Newborn Nursery

### The Newborn Nursery

- General appearance
- Feeding
- Voiding/pooping
- BONUS: Almost home!
- First visit to your pediatrician

## Part B: Going Home!

- Sleeping
  - Sudden Unexpected Infant Death (SUID)
- Temperature regulation
- Bathing
- Car seat safety
- Questions

# PART A

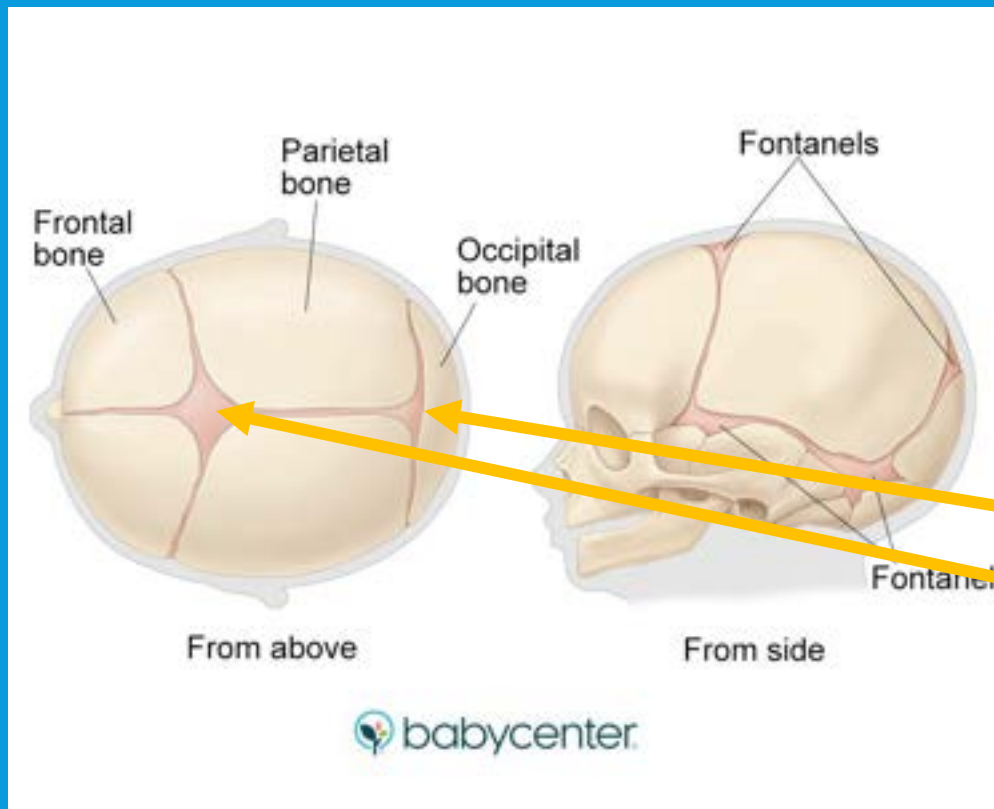
## The Newborn Nursery

# General Appearance

The image features a solid blue background. In the center, the text "General Appearance" is written in a white, sans-serif font. At the bottom of the image, there is a horizontal bar of a lighter green color, extending across most of the width.

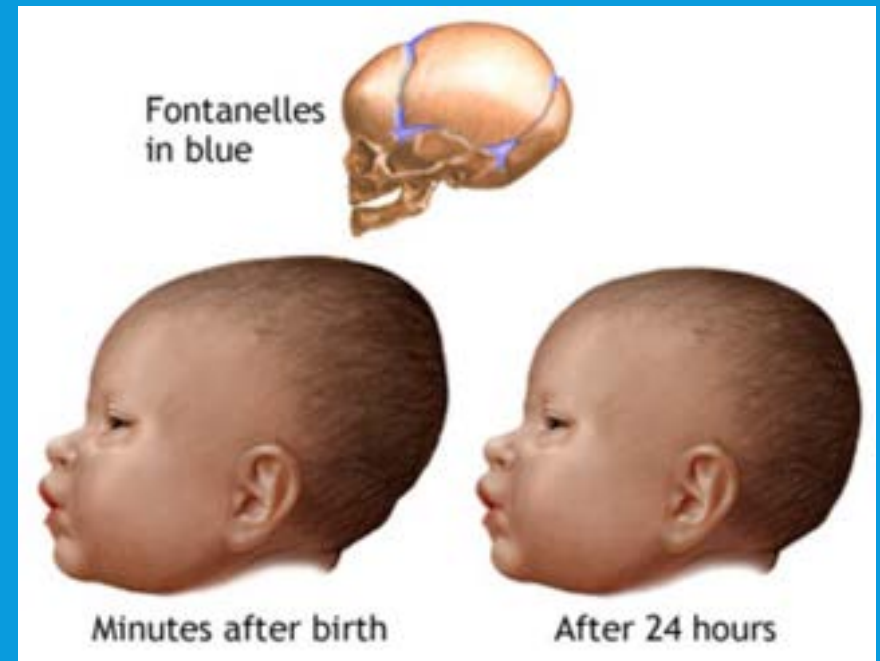
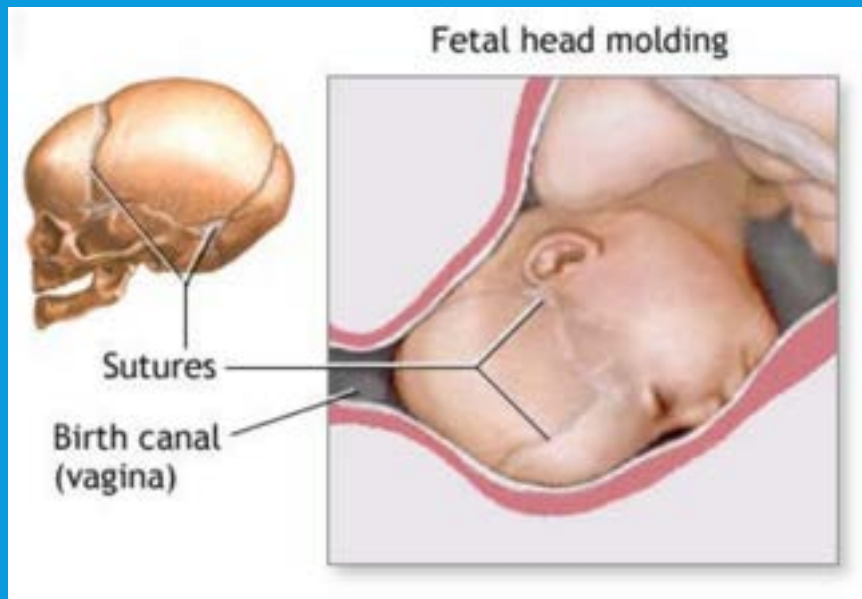


# FONTANELLE



- “Soft spots”
- Open areas in the skull covered by a tough, fibrous membrane
- Allows molding during birth and rapid growth of the brain
- Touching this area is safe
- Posterior fontanelle closes around 3 months
- Anterior fontanelle closes around 9-18 month

# MOLDING



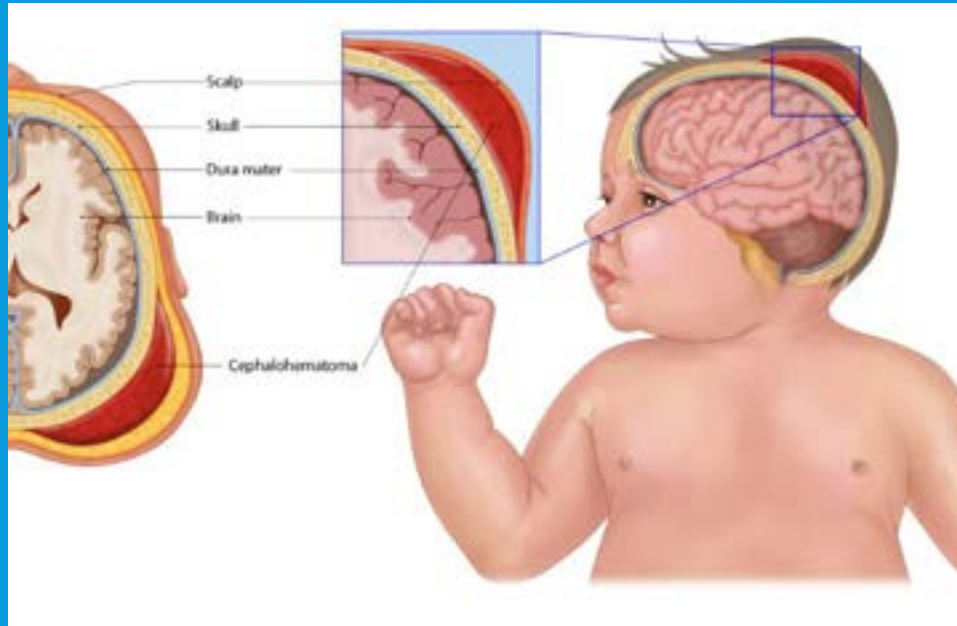


# CAPUT SUCCEDANEUM

- Benign swelling of the scalp formed during delivery
- Caused by prolonged labor, vacuum assisted delivery, or premature rupture of membranes
- Resolves within a few days
- Does not require treatment



# CEPHALOHEMATOMA



- Accumulation of blood beneath the scalp
- Caused by prolonged labor, macrosomia, instrument assisted deliver (forceps or vacuum)
- Resolves within a few days
- If large it can lead to calcification of the hematoma
- Does not require treatment
- Increased risk for jaundice

# SUBCONJUNCTIVAL HEMORRHAGE



- Broken blood vessels in the eye that occurs during delivery due to increased pressure as baby exits birth canal
- Benign
- Will resolve spontaneously without treatment

# NEONATAL CONJUNCTIVITIS: EYE DISCHARGE



- Usually due to a blocked tear duct, chemical or infectious conjunctivitis
- Drainage develops within 1 day to 2 weeks after birth
- There may be watery, bloody, or pus-like drainage from the eye
- Treatment depends on the cause
  - Blocked tear duct: massages, warm compresses
  - Infectious: antibiotics

# ANKYLOGLOSSIA: TONGUE TIE



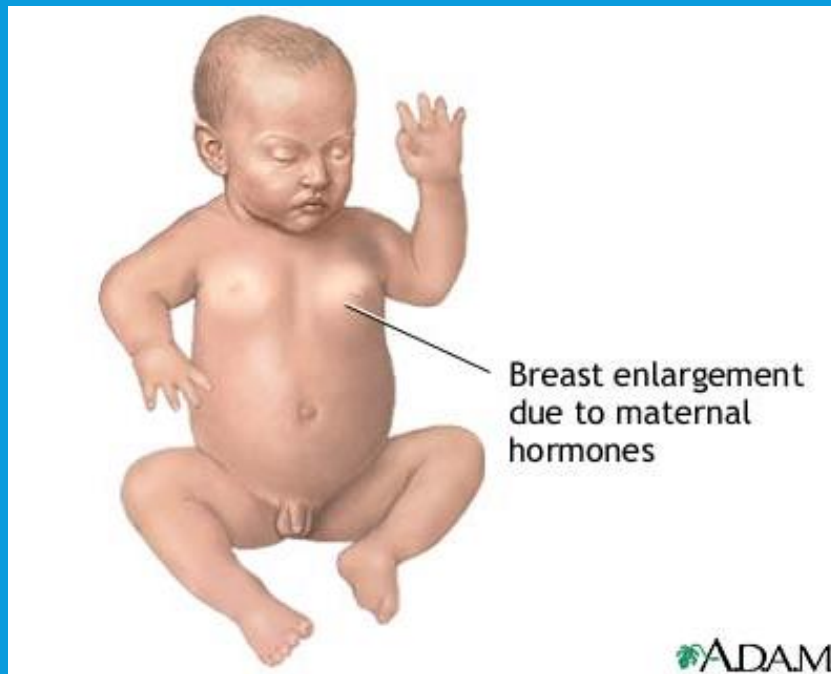
- Short band (lingual frenulum) that connects the bottom of the tongue to the mouth
- The band normally stretches with time, movement, and growth
- Most infants can breastfeed without difficulty
- No intervention required unless difficulty feeding, pain with breastfeeding, or difficulty with speech later in life

# EPSTEIN PEARLS



- Small, keratin-filled cysts presenting on the oral mucosa—commonly found on palate
- Very common and benign
- Spontaneously resolve with within several months of birth

# BREAST BUDS



- It is normal for a neonate (boys and girls) to have swollen breasts or firm lumps beneath the nipple
- Sometimes the nipples may leak a milky discharge (used to be called 'witch milk')
- This is due to maternal hormones passed to the baby in utero
- Never squeeze or massage the breasts or nipple as this can damage the developing breast bud
- Call the doctor if they become asymmetric, red, tender, or purulent discharge is seen

# UMBILICAL CORD CARE



- In the first few weeks after the baby is born, you will need to keep the umbilical stump clean and dry until it shrivels up and falls off.
- Fold the top of the diaper below the stump to prevent irritation and contact with urine.
- Baby soap and water may be used for cleaning. Be sure to dry the stump afterwards if water reaches it.
- **No need to use alcohol!**
- There may be a small amount of blood around the diaper when the stump falls off. This is normal.
- If there is a large amount of blood, apply pressure to the area and call your pediatrician.
- Although rare, if the area around the stump becomes red, swollen, painful, or has foul-smelling drainage, call your pediatrician as it may be infected and require antibiotics.
- The stump should fall off within 3 weeks.



# UMBILICAL GRANULOMA

- Overgrowth of scar tissue in place of previous umbilical stump
- It can be fleshy pink, or bright red
- It can leak a small amount of clear or even blood-tinged fluid
- If you think your baby has a granuloma call your peds office for an appt since this can be easily treated there.



# UMBILICAL HERNIA



Small defect in the abdominal wall that allows tissue to bulge through when there is increased abdominal pressure

Laughing, crying, stooling, squirming

Usually heals spontaneously in 12-5 with no complications

It may take longer in African American children for unknown reasons

It is not necessary to put tape over the area

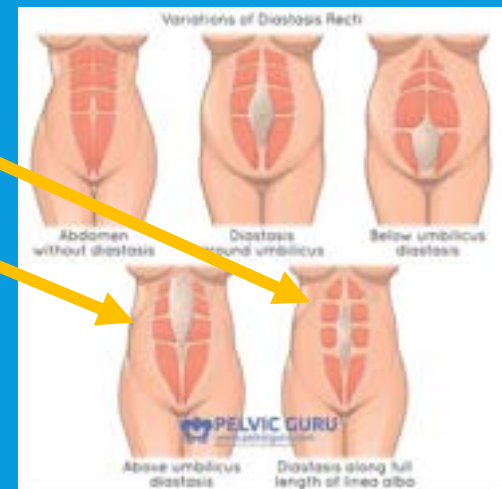
If you are not able to massage the hernia back into the abdomen or it appears painful, call the pediatrician immediately



# DIASTASIS RECTI



- Vertical bulge of abdomen
- Normal finding
- Caused by weakening of tissue joining abdominal wall muscles



# GENITALIA

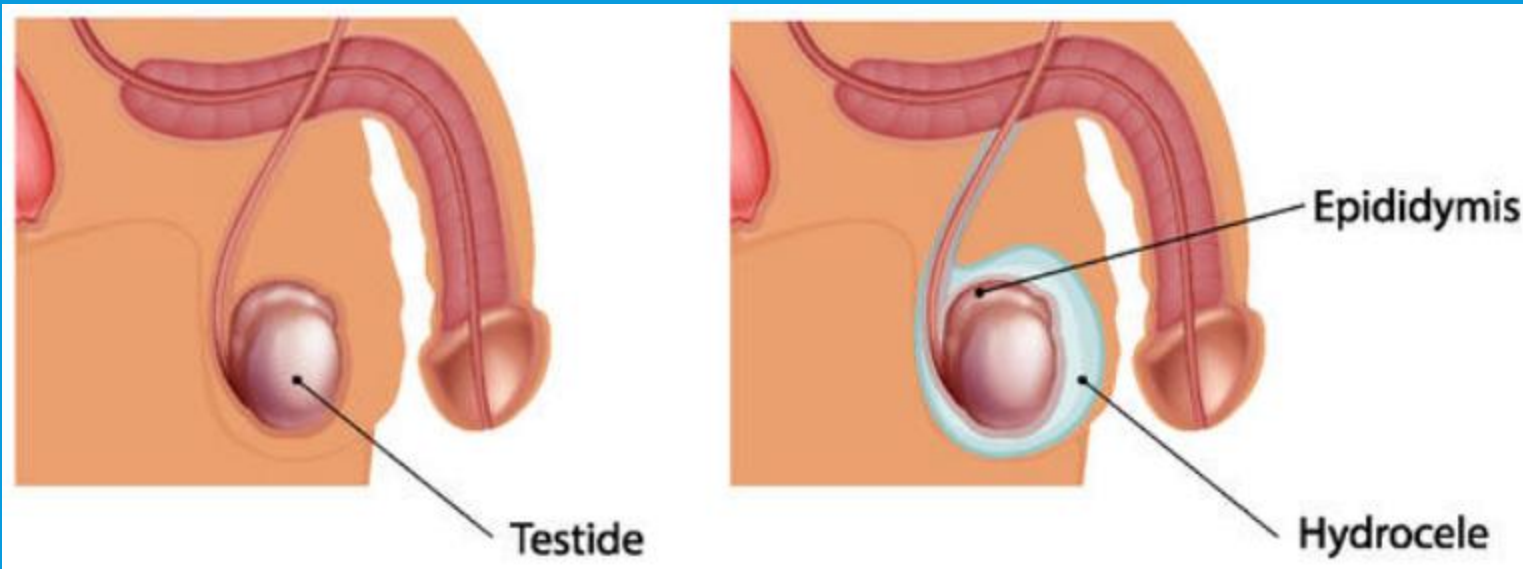
# VAGINAL BLEEDING AND DISCHARGE



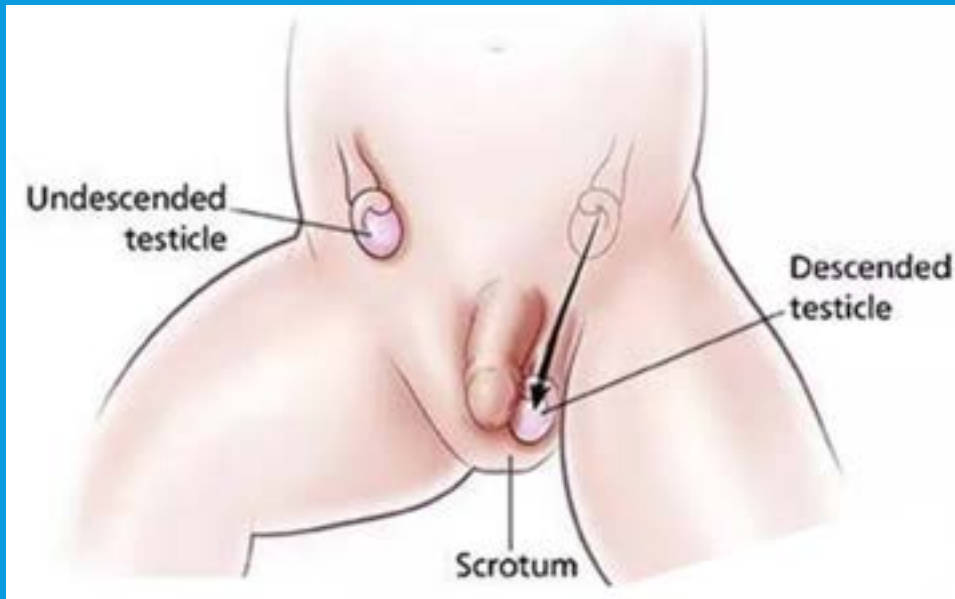
- As maternal estrogen in the baby's bloodstream declines, vaginal discharge may occur
- Discharge may be clear-white or pinkish and blood-tinged
- This is normal and should not last more than 3-4 days

# HYDROCELE

- The newborn scrotum can be filled with clear fluid
- Resolves over 6-12 months



# UNDESCENDED TESTICLE



- The testicle is not fully in the scrotum in about 4% of newborns
- Many will gradually descend into normal positioning in the following months
- By 1 year of age, less than 1% remain undescended
- These may require surgical intervention to preserve fertility and reduce risk of testicular cancer

# SKIN

Common findings, and care.



# VERNIX CASEOSA



- Thick, waxy or cheesy substance that covers a neonate when first born
- Functions to protect the baby while floating in amniotic fluid in the womb and it helps them adapt to extrauterine life
- Should wash off during the first bath.
- Some parents elect to not have it washed off until the 1<sup>st</sup>-2<sup>nd</sup> week of life.
  - This is completely your choice!

# SKIN PEELING

Starts between 24-48 hrs and peaks between days 6 and 10



Ok to use gentle emollients and/or moisturizers



# ERYTHEMA TOXICUM

- Small pustules with surrounding red splotches
- Occur in 50% of newborns
- Usually occurs within 5 days
- Can be intermittent over the first couple of weeks of life
- Resolves spontaneously
- No intervention required



# BABY ACNE

- Caused by exposure to maternal hormones
- Red bumps with a small pustule are seen usually on the face
- Usually occurs within 2-4 weeks but may appear up to 4 months
- Last for 12-18 months



# SEBORRHEIC DERMATITIS



- Red patches with greasy, yellow scales
- Appears within the first 2 months of life
- Can be seen in skin folds, face, neck, and scalp ('cradle cap')
- Can go away on its own but it can also require treatment with antifungal shampoos/creams or steroid creams in some cases
- If noted on face try washing with gentle baby soap (fragrance/dye/perfume free)

# NEVUS SIMPLEX: ANGEL'S KISS, STORK BITE

- Common, temporary and pink, red, or purple birthmarks
- Usually appear on the forehead, eyelids, nose or the back of the head and neck
- Due to stretching and dilation of underlying blood vessels
- May darken when baby cries or with temperature changes
- Purely cosmetic, no intervention required
- Stork Bites on the face normally resolve within 18 months



# CONGENITAL DERMAL MELANOCYTOSIS

- Flat, blueish-gray birthmarks appearing at birth or shortly after
- Due to a collection of melanocytes in the deep layers of the skin
- Common amongst Asian, Native American, Hispanic, Indian, and African Americans
- No intervention needed
- Usually fade between 1-6 years of age



# MILIA

- Tiny white bumps on the skin, usually on the nose and cheeks
- Dead skin (keratin) becomes trapped in small pockets at the surface of the skin
- Resolve by 1 month of life but they can persist for a bit longer





# INFANTILE 'STRAWBERRY' HEMANGIOMA

- Benign (non-cancerous) tumor of small blood vessels
- 80% involve head and neck
- Fastest growth occurs within first 8 weeks
- Size peaks at 12 months
- Most resolve by 4-6 years of age
- Most are small and harmless requiring no intervention
- Intervention may be required for large hemangiomas or depending on their location



# LANUGO: HAIR

- Fine hair that covers most of the baby's skin, especially in preterm babies
- Helps with thermoregulation
- Disappears within a few weeks of life



# ACROCYANOSIS

- Blueish, white, or gray coloring of the hands, feet, or around the mouth
- Caused by changes in blood flow as the baby transitions to a new environment or if they cry
- This is temporary, and remedied by increasing room temperature, warming baby, or when they stop crying
- This is normal and will resolve on its own



# JAUNDICE



# JAUNDICE

- Jaundice is yellowing of the baby's skin or eyes
- It occurs when there is a high level of bilirubin in the baby's blood
- Bilirubin is a yellow byproduct from the breakdown of red blood cells
- Most newborns have physiologic jaundice which is normal
  - Noticeable around 2-4 days and resolves within 2 weeks
- Can occur due to poor oral intake (breastmilk or formula) or substances that can be present in some moms' breast milk
- Other causes include baby's increased bruises/hematomas (remember cephalohematomas?), blood mismatch between baby and mom, infection, or abnormal blood cell shapes
- Treatment: Increase oral intake and phototherapy depending on severity



# FEEDING

Breastfeeding

# BENEFITS OF BREASTFEEDING



Breastfeeding protects against a variety of diseases and conditions via transference of antibodies and other immune products through breast milk:

Severs bacterial infections

Diarrhea

Respiratory tract infections

Necrotizing enterocolitis

Otitis media

Urinary tract infections

Late-onset sepsis in premature infants

Type 1 and 2 diabetes

Leukemia, lymphoma, and Hodgkin's


Childhood obesity




# BENEFITS OF BREASTFEEDING FOR MOTHERS

- Decreased postpartum bleeding
- Rapid uterine involution
- Decreased menstrual blood loss and increased child spacing (lactational amenorrhea)
- Earlier return to pre-pregnancy weight
- Decreased risk of breast and ovarian cancers


# RAPID FIRE QUESTIONS ABOUT BREASTFEEDING...



How long does it take for my milk to come in?



Is there anything I can do to help with my supply?



How long should baby stay at the breast?

Moms who have a vaginal delivery usually get their milk within the first 3 days post-delivery. For C-section moms, the milk can take a little bit longer (5-6 days at max) to come in fully.

**Absolutely!**

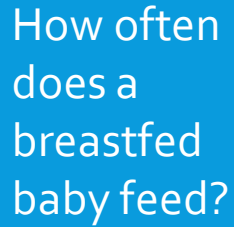
Offer the breast frequently to baby, manually express, or pump. Nipple stimulation is very helpful. Make sure to keep this in a schedule- every 3 hrs.

Drink at least 100 oz of water per day

Make sure you are eating well.

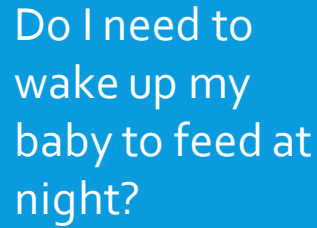
Rest when possible.

Once breastmilk is in, the total time spent in one session should be between 20-30 minutes. This is to prevent any non-nutritional suckling (baby using you as a paci).



How often does a breastfed baby feed?

Babies can breastfeed very frequently in the beginning. This is called cluster feeding. It helps to 'call milk in.' Typically, once milk is in most will breastfeed every 2-3 hrs.



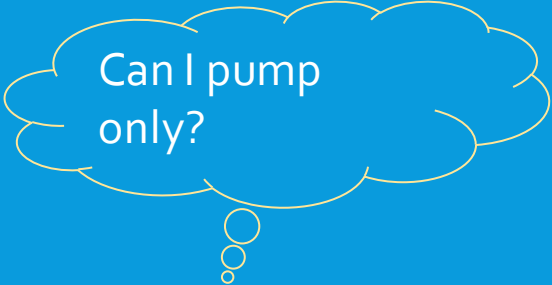
Do I need to wake up my baby to feed at night?

Yes! A baby less than 1 month of age should never go more than 3 hrs without feeding. 'Good babies' need to be reminded to feed since they might want to sleep longer and their sugar levels can drop causing health problems




Do I offer both breasts always?

Some moms offer both breasts during the same session, but some also alternate breasts. Be an 'equal opportunity breaster!'



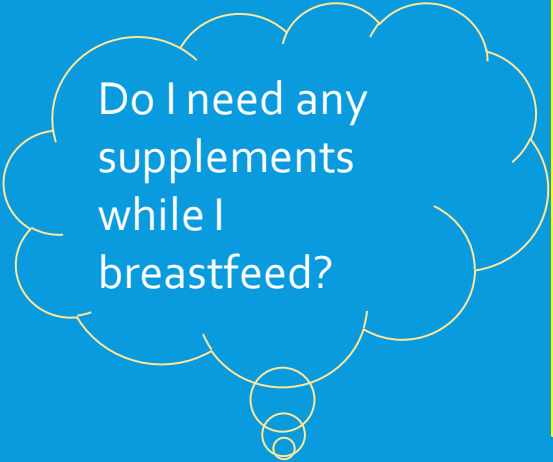
Can I pump only?

It is completely ok to pump! Ok to pump in the start while you are figuring direct breastfeeding. Always offer the breast first. There are many moms who decide to become exclusive pumpers as well.



Does my baby need any vitamins?

Baby should take 400 IU daily. You can obtain drops OTC. If mom desires to take enough vitamin for both baby and her she must take 6000 IU daily so baby can get enough through the breastmilk.



Do I need any supplements while I breastfeed?

You should continue with your multivitamins while breastfeeding or have postnatal vitamins daily. You must ensure that you are taking at least:

- Calcium - 1,300 mg
- Vitamin C- 120 mg
- Vitamin D- 600 IU



That's ok! Breastfeeding can be really hard!  
Ask for a lactation consultant to visit you while in the hospital or schedule a consultation when you get home.

Tip: Some insurances will cover up to 5 visits!  
Find some IBLCs that are in-network 😊



# FEEDING

Formula Feeding

# TYPES OF FORMULAS

## POWDER

- Powder: typically 1 scoop of formula per 2 oz of water



## READY TO FEED

- No mixing required



## LIQUID CONCENTRATE

- Liquid concentrate: usually equal parts formula and water





# BABY FEEDING CHART

Age	Ounces per Feeding	Number of Feeds in 24 hours
Newborns	2 to 3 oz.	8 to 12 feedings per day
2 months	4 to 5 oz.	6 to 8 feedings per day
4 to 6 months	4 to 6 oz.	5 to 8 feedings per day (you can also gradually introducing solid foods)
6 to 12 months	7 to 8 oz. <small>Tip: These are pretty high volumes. Most babies max out around 5-6 oz.</small>	5 to 6 feedings per day, plus 2 to 3 meals of solid foods

## USE QUICKLY OR STORE SAFELY



Use prepared infant formula within **1 hour from start of feeding** and **within 2 hours of preparation.**



If you are not going to use the prepared infant formula within 2 hours, immediately store the bottle in the refrigerator and use it **within 24 hours.**



**Throw out any infant formula that's left in the bottle** after feeding your baby. **Do not refrigerate it to save for later.** The combination of infant formula and your baby's saliva can cause bacteria to grow.

# SPITTING UP (REFLUX) VS. VOMITING

- All babies are prone to spit-up as their musculature is weak and they tend to gulp air while feeding
- Reflux tends to occur when the baby is full or their position is suddenly changed
- Spitting up is the easy flow of contents from the stomach to the mouth, frequently with a burp
- Vomiting is more forceful
- Call the pediatrician if there is forceful vomiting, a neon yellow or green color, blood, worsening in frequency, or if the baby appears ill

# TECHNIQUES TO REDUCE REFLUX

- Keep the baby in an upright position (30 degree angle) for 30 minutes after feeding
- Burp the baby after every feed or even halfway through the feed
- Try smaller amounts per feeding or longer periods between feeding
- Loosen diapers

# PACIFIERS

## Pros:

- Soothe a fussy baby
- Offers temporary distraction
- Helps your baby fall asleep
- Ease discomfort during flights by equalizing pressure
- May help reduce the risk of sudden infant death syndrome (SUIDS)
- Pacifiers are disposable

## Cons:

- Your baby might become dependent on the pacifier to fall asleep
- Prolonged pacifier use might lead to dental problems
- Pacifier use could disrupt breastfeeding\* consider waiting to offer a pacifier until you've at least established a good latch
- \*\*Most of my patients have been excellent at breastfeeding and have a paci 😊

# WASTE!

Voiding and Pooping!

# URINATION

- Expect 1 wet diaper for each day of life until day 5. Thereafter, expect a minimum of 5 wet diapers per day.
- Some infants may develop urate crystals or “brick dust” in their urine in the first week of life, especially in breastfed infants. This may be a sign of dehydration.

# STOOLING

- The first stool is referred to as meconium which is a thick, green-black substance that is sticky and odorless and may persist for a few days
- Transition stools change from meconium to yellow, seedy stools which is normal
- Stools may have a small amount of blood due to swallowed maternal blood
- Transition usually occurs by day 3-4 of life while a lack of transition is usually due to inadequate feeding





# STOOLING HABITS

- Frequency of bowel movements varies greatly. Your baby's frequency is considered normal if they are feeding well and have soft, regular stools
- Pushing, straining, grunting, becoming flushed, and drawing up the legs can be normal at any age- Remember these two words: **INFANT DYSICHEZIA**
- **True constipation:** crying with stool passage, hard and pellet-like stools
- **True diarrhea:** sudden increased in amount, bloody, or watery

# DIAPER RASH

- Very common!
- It can be caused by:
  - Urine and/or poop content (acidity, ammonia etc)
  - Yeast
  - Bacteria
  - Eczema
- Treatment can be tricky sometimes depending on severity.
- MAIN TAKE-AWAY: PREVENTION IS KEY!
- Change the diaper often and as soon as possible after the baby urinates or passes stool
- Pat the area dry w/ towel, cloth, or washcloth or allow to air-dry (you can also use blow dryer at lowest setting)
- Use absorbent diapers
- MY PERSONAL RECOMMENDATION: ALWAYS HAVE A BARRIER CREAM/OINTMENT ON.
  - Zinc oxide (Desitin/Boudreaux), or petroleum jelly-based products to help keep moisture away from your baby's skin – must be applied to completely clean, dry skin
  - LOVE VASELINE 😊
- Do not use wipes that have alcohol or perfume and do not use talcum powder as it can get into baby's lungs.

# ALMOST GOING HOME!

What happens before we let you go!

# EYE PROPHYLAXIS: ERYTHROMYCIN OINTMENT

- Ocular prophylaxis with erythromycin ointment is the standard of care for all newborns in the United States
- Erythromycin prevents gonococcal ophthalmia neonatorum (GON) which is a severe infection of the eye that can lead to corneal scarring, ocular perforation, and blindness in as early as 24 hours after birth.
- The United States Preventive Services Task Force (USPSTF) recommends this to all neonates as it is safe and effective.

Gonorrhea

# BLEEDING PROPHYLAXIS: VITAMIN K

- Babies are born with insufficient levels of Vitamin K which helps blood clotting. This deficiency puts them at risk for severe bleeding.
- Per the CDC, research has shown that a single Vitamin K shot at birth prevents dangerous bleeding which can lead to brain damage and death.
- Breastmilk has very little Vitamin K which means babies will be deficient until they start trying regular foods around 6 months.

# Vitamin K

Babies are born with very small amounts of **Vitamin K** in their bodies which can lead to serious bleeding problems. **Vitamin K** is needed for blood to clot normally.

Infants who do not receive **the vitamin K injection** at birth can develop **Vitamin K Deficiency Bleeding (VKDB)**.

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**One dose** given after birth will protect your baby from **VKDB**.



# Hepatitis B Facts

**1.4 million** people in the United States are living with chronic HepB. Most were infected as infants or during early childhood.



HepB can survive over **7 days** on contaminated surfaces.

Up to **two-thirds** of Americans living with chronic HepB do not know they are infected.

**90%** of infants and **50%** of children under 5 who contract hepB will develop chronic disease, leading to liver cancer, cirrhosis, and premature death.

**HepB** is transferred by bodily fluids, usually blood. It can be passed from an infected mother to her baby at birth, or from a family member in close household contact to young children.

HepB infections have decreased **95%** in children and adolescents since 1990 when the Hepatitis B vaccine was recommended for all newborns.



# CIRCUMCISION

- Procedure during which anterior portion of foreskin is removed to expose glans of penis.
- This is a complete elective procedure that can be completed in the hospital or at your pediatrician's/OB's office if there are no anatomical abnormalities
  - **Hospital: Mention right away to your OB triage nurse, mention once again to your mom-baby nurse, and hospitalist**
    - It will be performed by a pediatrician or your OB (depending on provider and availability)
  - Outpatient: ask your pediatrician during a prenatal visit if they perform the procedure in the office
- If elected: You might need LOTS of **VASELINE**, depending on the style of procedure.

# PEDIATRICIAN FOLLOW-UP

- It is extremely important to follow up with your pediatrician shortly after discharge from the hospital
  - CALL US BEFORE YOU LEAVE THE HOSPITAL!
  - We typically recommend scheduling the first appt within the first 24-48 hrs post-discharge unless told otherwise by hospitalist
- This allows for baseline examination close to birth, weight check, evaluation for jaundice, assurance of appropriate care and feeding, and to answer questions.
  - Write your questions down
  - Make sure your baby is bundled well and is wearing a hat. Our offices are very cold!
  - Bring extra blankets, and outfits. They like to poop and pee themselves during our first visit 😊

# PART B

WELCOME HOME!

# Safe Sleep

A horizontal teal bar is located at the bottom of the slide, extending from the left edge towards the right.

## Safe Sleep Setting for Your Baby

Creating a safe sleep environment can reduce your baby's risk of sleep-related causes of infant death.



**Baby should sleep in the same room with parents.**



**Use a safety-approved crib with a firm mattress and fitted sheet.**



**Baby should not sleep on the couch or chair, with someone or alone.**



**Keep objects out of the baby's sleep area/crib.**

- Do not use pillows, blankets, bumpers, toys, plush objects.
- Always make sure that nothing is covering your baby's head.



**Do not smoke near your baby.**



**Dress baby in sleep clothing. Do not use a loose blanket as clothes and be sure not to over bundle.**



**Always place your baby on its back to sleep.**

# Sudden Unexpected Infant Death Syndrome (SUIDS)

# SUIDS

- Cause is unknown but possibly linked to problems in the sleep/wake cycle or an inability of the infant to detect increase of carbon dioxide levels
- **FOLLOW SAFE SLEEP GUIDELINES ALWAYS!**
- Offer a pacifier when going to sleep
- Ensure the room temperature is not too hot
- Keep your baby in a smoke-free environment
- Mothers should avoid alcohol and drug use during and after pregnancy
- Breastfeed your baby if possible

# Temperature





# TAKING A NEWBORN'S TEMPERATURE

How to take a rectal temperature:

1. Apply a small amount of Vaseline to the silver tip of your rectal thermometer.
2. Insert the silver tip until no longer visualized. Most thermometers will have a change in width close to the tip. That's how far you can insert.
3. Wait until your thermometer screen blinks, changes colors, or you hear a musical tone.
4. Clean your thermometer with a wipe, and store in a WELL LABELED CONTAINER OR BAG (EEK!)

True fever: 100.4 F or greater

Hypothermia: 97.4 F or less

Take the babies temperature if they feel warm, appear ill, or have symptoms such as nasal congestion, cough, working hard to breath, vomiting, diarrhea, feeding difficulties, more fussy or sleeping more than usual.

*If your baby is less than 2 months of age and has a TRUE FEVER or is HYPOTHERMIC, PLEASE TAKE HIM/HER/THEY TO THE EMERGENCY DEPARTMENT.*

# TEMPERATURE REGULATION AT HOME

- Newborn nursery temperature should be at least 72 F for babies who are less than one month old
- Put one extra layer on the baby above what we are comfortable in ourselves
- For preterm babies, it is recommended to place a double hat on the head when going outside, especially in the winter
  - No hats for sleeping!

# WINTER IS HERE



Respiratory illness such as RSV peak during these times

Consider Beyfortus (RSV antibodies!) shot if available and offered by your pediatrician 😊

Try to limit visitation to the household, especially in the first 30 days of life

## Hand hygiene!

If your baby develops a true fever, please notify the pediatrician immediately or take to the Emergency Department

# Bathing




- Use warm, not hot, water – place your elbow under the water or touch with inner wrist to check temperature
- Keep your baby's umbilical cord dry
- Wash your baby's head last so that their head does not get too cold
- Have a towel ready to wrap your newborn in to dry and keep warm right after the bath



# Car Seat Safety



An illustration of a baby in a red car seat. The baby is wearing a yellow jacket and a blue harness. A blue blanket with white polka dots is draped over the baby's lap. A yellow jacket is shown below the car seat. The background is a light blue gradient with abstract shapes. Several white text boxes with black text provide safety instructions. The text boxes are: 'Adjust car seat angle so baby's head doesn't flop forward' (top right), 'In rear-facing car seats, harness straps should be at or below baby's shoulders' (top left), 'Harness straps should be snug (if you can pinch them, they're too loose)' (middle right), 'Chest clip should be at the center of baby's chest, level with armpits' (middle left), 'If it's cold, place a blanket on baby over the straps' (bottom middle), 'Remove baby's bulky coat or bunting before strapping in' (bottom left), and 'Remove headbands that could slip over baby's face' (bottom right).

Adjust car seat angle  
so baby's head  
doesn't flop forward

In rear-facing car seats,  
harness straps should  
be at or below  
baby's shoulders

Harness straps should  
be snug (if you can pinch  
them, they're too loose)

Chest clip should be at  
the center of baby's  
chest, level with armpits

If it's cold, place a blanket  
on baby over the straps

Remove baby's bulky  
coat or bunting  
before strapping in

Remove headbands  
that could slip  
over baby's face

# Remember...

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The next year of your life will be like no other. It will be full of ups and downs. Tears, laughter, and maybe some yelling there too. But it will be the only first year you will get with your little one.

Love, care, and give yourself grace.

You've got this!

- Dr. Tuttle 😊





# FINAL DISCLOSURE

- Most images for this presentation were obtained from google images and/or are part of a personal collection.
- Special thanks to the residents from the UF Pediatrics Residency Program at the Studer's Family Children Hospital for their contributions to this presentation.