**Pain Relief During Labor and Delivery**

Many things can cause pain during labor and delivery, including:

• Pressure on bones and ligaments due to the baby moving through the pelvis.

• Stretching of tissues due to the baby moving through the birth canal.

• Muscle tension due to anxiety or nervousness.

• The uterus tightening (contracting) and relaxing to help move the baby.

There are many ways to deal with the pain of labor and delivery. They include:

• Taking prenatal classes. Taking these classes helps you know what to expect during your baby’s birth. What you learn will increase your confidence and decrease your anxiety.

• Practicing relaxation techniques or doing relaxing activities, such as:

◦ Focused breathing.

◦ Meditation.

◦ Visualization.

◦ Aroma therapy.

◦ Listening to your favorite music.

◦ Hypnosis.

• Taking a warm shower or bath (hydrotherapy). This may:

◦ Provide comfort and relaxation.

◦ Lessen your perception of pain.

◦ Decrease the amount of pain medicine needed.

◦ Decrease the length of labor.

• Getting a massage or counterpressure on your back.

• Applying warm packs or ice packs.

• Changing positions often, moving around, or using a birthing ball.

• Getting:

◦ Pain medicine through an IV or injection into a muscle.

◦ Pain medicine inserted into your spinal column.

◦ Injections of sterile water just under the skin on your lower back (intradermal injections).

◦ Laughing gas (nitrous oxide).

Discuss your pain control options with your health care provider during your prenatal visits. Explore the options offered by your hospital or birth center.

**What kinds of medicine are available?**

There are two kinds of medicines that can be used to relieve pain during labor and delivery:

• Analgesics. These medicines decrease pain without causing you to lose feeling or the ability to move your muscles.

• Anesthetics. These medicines block feeling in the body and can decrease your ability to move freely.

Both of these kinds of medicine can cause minor side effects, such as nausea, trouble concentrating, and sleepiness. They can also decrease the baby's heart rate before birth and affect the baby’s breathing rate after birth. For this reason, health care providers are careful about when and how much medicine is given.

**What are specific medicines and procedures that provide pain relief?**

**Local Anesthetics**



Local anesthetics are used to numb a small area of the body. They may be used along with another kind of anesthetic or used to numb the nerves of the vagina, cervix, and perineum during the second stage of labor.

**General Anesthetics**

General anesthetics cause you to lose consciousness so you do not feel pain. They are usually only used for an emergency cesarean delivery. General anesthetics are given through an IV tube and a mask.

**Pudendal Block**

A pudendal block is a form of local anesthetic. It may be used to relieve the pain associated with pushing or stretching of the perineum at the time of delivery or to further numb the perineum. A pudendal block is done by injecting numbing medicine through the vaginal wall into a nerve in the pelvis.

**Epidural Analgesia**

Epidural analgesia is given through a flexible IV catheter that is inserted into the lower back. Numbing medicine is delivered continuously to the area near your spinal column nerves (epidural space). After having this type of analgesia, you may be able to move your legs but you most likely will not be able to walk. Depending on the amount of medicine given, you may lose all feeling in the lower half of your body, or you may retain some level of sensation, including the urge to push. Epidural analgesia can be used to provide pain relief for a vaginal birth.

**Spinal Block**

A spinal block is similar to epidural analgesia, but the medicine is injected into the spinal fluid instead of the epidural space. A spinal block is only given once. It starts to relieve pain quickly, but the pain relief lasts only 1–6 hours. Spinal blocks can be used for cesarean deliveries.

**Combined Spinal-Epidural (CSE) Block**

A CSE block combines the effects of a spinal block and epidural analgesia. The spinal block works quickly to block all pain. The epidural analgesia provides continuous pain relief, even after the effects of the spinal block have worn off.

This information is not intended to replace advice given to you by your health care provider. Make sure you discuss any questions you have with your health care provider.

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\*\*La Leche League International – Article on Starting Solids\*\*

According to recommendations from the World Health Organization (WHO), the American Academy of Pediatrics (AAP), and the American Public Health Association (APHA), human milk is the only food that healthy, full-term babies need for about the first six months of life. The composition of human milk changes in response to a variety of cues, so that each mother provides milk that meets her own baby’s unique needs. Human milk provides immunity factors for as long as the baby nurses, and many of the health benefits of breastfeeding continue well into childhood and beyond.

Feeding complementary foods to your baby before he is ready is typically messy and inefficient as he will naturally push the food out with his tongue as long as the tongue-reflex is functioning. By waiting for him to be developmentally ready, he becomes an active participant in eating, rather than merely a passive recipient. This helps to put him in charge of how much he eats, teaching him important fullness cues. Starting solid foods before your baby is ready will not increase his sleep at night, is not necessary for larger babies, and does not initially increase calories.

**Some Signs of readiness:**

* Baby is about six months old
* Baby is able to sit, unsupported
* Baby has lost his tongue-thrust reflex, meaning that he does not push foods out of his mouth with his tongue when they are offered
* Baby can pick things up between his fingers and thumb.

**How to start solids:**

* Nurse your baby before offering other foods. Your milk remains the single most important food in your baby’s diet until his first birthday. Additionally, he is more likely to show interest in new foods if he is not ravenously hungry. At this age, other foods are more for experimentation, play and fun. Remember to offer to nurse again after the solid “meal”.
* Some babies like to sit in a high chair while others prefer to sit in somebody’s lap. Babies are messy, so you may want to put an old shower curtain under his chair for easier cleanup.
* Offer food when the baby is in the mood to learn. This could be during a quiet time, or it could be at a social time when the rest of the family is also eating.
* Offer small amounts of food. Your baby is learning to eat and enjoy new textures, rather than having a full meal. Gradually increase the amount of food and the frequency of feeding to satisfy your baby’s hunger and interest.
* If your baby does not seem to like a new food, offer it again at another time. It may take a few times before he learns to enjoy a new flavor.
* Many babies prefer finger foods to spoons. First foods are for fun and experimentation. Neatness doesn’t count! As with your milk, allow baby to control the amount he eats, and stop when he is done. Offering “finger foods” allows your baby to do this.
* Never leave a baby or young child alone with food in case they begin to choke. Never give your baby small, hard foods like peanuts or popcorn. Foods that are circular in shape such as carrots or grapes should be sliced and then halved or quartered.
* Use only single ingredients and wait about a week between introducing each new food. Then, if something upsets your baby, you will know exactly what it was. Some signs of a possible allergic reaction include a rash, runny nose, or sore bottom. If you see any of these signs, wait a week and try the food again. If you get the same reaction, hold off until your baby is a year old and try again.
* If there is a family history of food allergy, consult your doctor or allergist for advice on when to start your baby on foods that tend to be more allergenic as it may differ from recommendations for babies without allergic history.  These foods include citrus fruits (including oranges, lemons, and grapefruit) kiwi, strawberries, peanuts and peanut butter, eggs, soy products (including soy milk and tofu), and cow’s milk (including cheeses, yogurt, and ice cream).

**First foods for babies**

**Fruits**Most babies love fruits. Make sure they are ripe, and wash well before peeling. Here are some favorites:

* Bananas cut into slices which have then been halved or quartered
* Unsweetened applesauce, or tiny apple chunks that have been softened by cooking
* Plums, peaches, pears, and apricots, gently cooked if necessary
* Avocado diced into small, bite size pieces

**Vegetables**Fresh vegetables should be washed, peeled and cooked until tender. Frozen veggies are convenient to have on hand. Avoid the canned varieties to which salt has been added. Your baby may enjoy:

* Baked or boiled sweet potatoes, in tiny chunks
* Mashed white potatoes
* Baby carrots, green beans, peas and squash

**Meat and Fish**Babies often prefer well-cooked chicken, which is soft and easy to eat when shredded. Be careful to remove even the tiny bones when serving fish.

**Beans and Legumes**Remove the skins from beans as they tend to be harder to digest. If you use canned beans for convenience, make sure they are unseasoned.

**Grains and Cereals**Commercial, iron-fortified cereals are often the first foods served to babies who are not breastfeeding because they need the extra iron, but breastfed babies are rarely anemic as the iron in human milk is well-utilized. If there is concern about the baby’s iron levels, a simple test can be done in the doctor’s office.

Whole grain cereals, breads and crackers are the most nutritious. Wait until later in the year before offering wheat products. If you use cereals, make sure that they only have one ingredient and use either water or your own milk for mixing. Many mothers prefer to let their older babies chew on a hard bagel or an end of bread instead of sugary teething biscuits.

* Making your own baby foods saves money and allows you to give your baby the freshest food available.
* Babies under a year should not be given honey or corn syrup as they carry the risk of botulism.

**INTRODUCING WATER TO OLDER BABIES**

* During the first 6 months of age, even in hot climates, human milk contains all the water babies need.
* Once a baby is 6 months old you can offer water in moderation. Try giving a small amount of water in an ordinary or spouted cup.
* If tap water is safe to drink in your country or region it’s fine to give it to your baby. Avoid bottled mineral water which can contain high levels of minerals, and drinks that contain sugar, sweeteners and caffeine.
* Because human milk contains a high percentage of water many older babies or toddlers get all the fluids they need through breastfeeding. Some babies and toddlers may need to drink water with solid food to avoid constipation.

**References**

The American Academy of Pediatrics: [**http://pediatrics.aappublications.org/content/129/3/e827.full#content-block**](http://pediatrics.aappublications.org/content/129/3/e827.full#content-block)

The UK NHS: [**https://www.nhs.uk/conditions/pregnancy-and-baby/solid-foods-weaning/**](https://www.nhs.uk/conditions/pregnancy-and-baby/solid-foods-weaning/)

The Canadian Paediatrics Society: [**https://www.caringforkids.cps.ca/handouts/feeding\_your\_baby\_in\_the\_first\_year**](https://www.caringforkids.cps.ca/handouts/feeding_your_baby_in_the_first_year)

The Australian Raising Children Network: [**http://raisingchildren.net.au/articles/when\_to\_introduce\_solids.html**](http://raisingchildren.net.au/articles/when_to_introduce_solids.html)