



You are receiving this information because you (might) undergo a caesarean section. Here you can read more about this surgical procedure: how to prepare for it, how the operation proceeds, and what possible complications might occur. You will also find information about the birth of your child, breastfeeding, and what happens after the surgery. If you have any questions, please contact us. Our contact details are at the end of this brochure.

## What is a caesarean section?

A caesarean section (also known as a C-section) is a surgical procedure where the child is delivered through the abdominal wall. The operation takes about 45 minutes, sometimes longer, sometimes shorter. The baby is usually born within fifteen minutes after the start of the operation. After that, the gynecologist will close the uterus and various layers of the abdominal wall.

## The reason for a C-section

The gynecologist advises a C-section only if a vaginal delivery is not possible or poses too great a risk for you, your child, or both. Because complications can occur with a C-section, we perform the operation only when there is a valid reason.

## A planned C-section

Sometimes, it is clear before pregnancy that a C-section will be necessary, for example, if you have had previous surgery on the uterus. Other times, it becomes apparent during pregnancy that a C-section is needed. This can happen with an abnormal fetal position, or if, for example, the placenta (afterbirth) is covering the cervix, if a fibroid/myoma is preventing the baby from descending, or if there are complications, such as a poorly functioning placenta. If a C-section is decided upon before delivery, we refer to it as a planned or 'primary' C-section

## A natural C-section

Usually, a so-called natural C-section is performed. This is not always possible if the condition of the mother or child does not allow it. A natural cesarean section resembles a regular (vaginal) delivery as much as possible. Immediately after the gynecologist has delivered your baby from the uterus, the pediatrician checks its vital functions, such as heart rate and breathing. Then, your baby is placed directly on your chest. Skin-to-skin contact is important as it promotes bonding between you and your child. It also helps initiate breastfeeding earlier. Your skin and a warm air blanket ensure your baby maintains the right body temperature. You, your baby, and your (birth) partner will stay together continuously if possible. A nurse from the department will guide your partner and baby from the operating room to the maternity ward.

## Preparing for a C-section

As with any surgery, a planned C-section requires a preoperative examination of your health. This can be done by phone or through a visit to the anesthetist's preoperative consultation. You will be asked questions about your health, and sometimes a physical examination, such as listening to your heart and lungs, will be performed. The anesthetist will discuss the choice between general anesthesia and a spinal block with you. Additionally, you will have a telephone appointment with the nurse or maternity nurse from the department where you will be admitted



## Day of the surgery

On the day of the surgery, you must fast as agreed with the anesthesiologist. Before reporting to the department, you will have your blood drawn at the hospital laboratory. For the benefit of your recovery, you may drink 2 glasses of apple juice before leaving home (at least 2 hours before the surgery). If you have diabetes, you may drink 2 glasses of water or tea. The nurse will check your vitals and listen to the baby's heartbeat. You will then change into a surgical gown. If necessary, the nurse will partially shave your pubic hair. Shortly before the surgery, you will be taken to the surgical department. You should not wear piercings, jewelry, hairpins, nail polish, or makeup; remove contact lenses or dentures. The nurse will receive a call when you are expected in the holding area. There, the nurse will provide your details, and you will receive an intravenous infusion of fluids. Your partner will change into scrubs and join you later. Before the surgery, your bladder must be emptied. In the operating room, the spinal block will be administered. The nurse will then insert a urinary catheter to allow urine to drain. A bag will collect the urine. Placing the epidural is a sterile procedure, and for this reason, the nurse and your partner will wait outside the operating room complex.

## What to bring

It is important to pack for a hospital stay of at least one day. Make sure you bring enough clothing for both yourself and the baby. We recommend bringing your own water bottle to ensure adequate fluid intake. We also suggest bringing a rinse bottle for a vaginal douche. Additionally, consider bringing a camera, bath slippers and loose-fitting underwear (taking the surgical wound into account). Towels and sanitary pads will be provided by the hospital. Don't forget to bring any personal medication you may need.

## Types of anesthesia

There are two types of anesthesia for a cesarean section: a spinal block and general anesthesia. You will usually receive a spinal block. General anesthesia is only chosen in case of urgency or after certain back surgeries or clotting problems. If you have a strong preference, let the anesthetist know.

## Spinal block

With a spinal block, the anesthetist injects an anesthetic between the vertebrae. Soon, your lower body and legs will become numb. You might feel temporarily nauseous due to a drop in blood pressure, for which medication will be provided. With a spinal block, you remain conscious during the birth of your child. During the operation, you can see, hear, and touch your baby. You will not feel pain during the surgery, although you might experience pressure on your abdomen. Occasionally, the anesthesia may spread slightly higher than just your lower body, which can make it feel as though breathing is difficult. This sensation is uncomfortable but not dangerous.



## General anesthesia

With general anesthesia, you will sleep during the C-section. We administer the anesthesia in a way that minimizes the amount of medication, such as sedatives and painkillers, that your child receives through the placenta. The anesthesia is given via an IV, and sometimes you may receive oxygen through a mask or nasal tube beforehand. While you are asleep, a tube will be placed in your trachea for ventilation. You will feel no pain and will wake up once the surgery is over. If all checks are good, you will be taken back to the department where your partner and baby are waiting

## The operation itself

Due to an increased risk of infection, you will receive antibiotics through an IV before the C-section begins. Almost always, the gynecologist makes a 'bikini cut': a horizontal (transverse) incision of 10 to 15 centimeters just above the pubic bone, around the hairline. Occasionally, the doctor makes an incision from the navel downwards. After opening various layers, the gynecologist usually makes a transverse incision in the uterus to deliver your child. The doctor then presses on your abdomen.

After your child is born, the umbilical cord is cut. To maintain sterility, your partner cannot do this, unlike in a natural birth. After cutting the umbilical cord, you receive a medication (oxytocin) via IV to contract the uterus. After the placenta is delivered, the gynecologist stitches the uterus and various layers of the abdominal wall using dissolvable material that does not need to be removed. If necessary, adhesive strips and a bandage are applied to cover the wound.

## After the birth

The pediatrician examines your child immediately after birth. The umbilical clamp or cording is then applied, and the partner can symbolically cut the umbilical cord further. If all goes well with the mother and child, the baby is placed in a pouch on the mother. We strive to separate mother and child as little as possible. If the condition of the mother and child allows, the partner and baby accompany the mother to the recovery room. Depending on the reason for the cesarean section, the gestational age, and the condition of your child, your child will either be admitted to the maternity ward or the neonatal unit. During the admission, we will observe your baby, monitor its weight and temperature, and support feeding times. The pediatrician will examine your baby again before discharge.

To protect the privacy of the staff, we ask that you do not take photos of the care personnel around the operating complex. During the operation, the surgical assistant will take photos of the birth with your camera. Of course, you can take photos of the baby and mother afterward.

## After a caesarean section

After a C-section, we will regularly check your blood pressure, pulse, blood loss, and urine output. You will receive fluids and medication to manage blood loss via an IV. We advise you to drink well after the operation. The IV will be stopped and removed once you start drinking and eating meals.

With a spinal block, you will have no control over your legs for the first few hours after the operation.

Gradually, you will regain feeling and strength in your legs.

We recommend sitting on the edge of the bed about four hours after the operation. After this, you can get out of bed, if necessary, with the help of a nurse.



The urinary catheter, which drains urine, can be uncomfortable. It will be removed early the next morning (between 05:00 and 06:00 hours).

We advise you to go to the toilet every three hours before feeding.

After a C-section, you will experience pain at the wound site and sometimes after-pains. The abdominal wall is often sore, not just at the scar but also higher, up to the navel. This is because the incision in the abdominal wall runs vertically under the skin, from the navel to the pubic bone.

You will be prescribed pain relief. To manage the pain, it is advisable to take the medication as prescribed. The wound dressing can be removed after six hours, and any adhesive strips can be removed by yourself after five to seven days. These may come off naturally while showering.

To prevent thrombosis, you will receive an injection of a blood thinner (Fraxiparine) once or twice a day under the skin of your flank (depending on the time of surgery). In some cases, you may need to continue this at home for up to six weeks after delivery. The nurse on the ward will provide you with the necessary information

### The first days

During the first days, you may still feel weak and somewhat dizzy when standing up; this will gradually decrease. After one or two days, your bowels will start to function again. Your abdomen is likely still bloated, and you may experience painful cramps. Movement is good for getting the bowels moving. We advise you to adhere to the following schedule;

Day 0	6 hours after the C-section: <ul style="list-style-type: none"> <li>• Start mobilizing, the first time under the guidance of a nurse or maternity assistant</li> <li>• Free movement in the room</li> </ul>
Day 1	<ul style="list-style-type: none"> <li>• Bladder catheter is removed</li> <li>• Showering</li> <li>• Toilet visits every 3-4 hours before feeding</li> <li>• Meal times at the table (3x 20 minutes)</li> <li>• Additional sitting on a chair for 2x 20 minutes besides these meal times</li> <li>• Expand mobilization to walking in the hallway: 3x a day 50 to 100 meter</li> <li>• Discharge</li> </ul>
Day 2-4	<ul style="list-style-type: none"> <li>• Walk 5 times a day 50 to 100 meters</li> <li>• Meal times at the table (3 times 20 minutes)</li> <li>• Additionally, 3 times 30 minutes out of bed</li> </ul>
Day 5-7	<ul style="list-style-type: none"> <li>• Walk 10 times a day 100 meters</li> <li>• Meal times at the table (3 times 20 minutes)</li> <li>• Expand mobilization</li> </ul>



## Breastfeeding

You can breastfeed after a C-section, regardless of whether the cesarean section was planned or not, and whether you received general anesthesia or an epidural. If your child is admitted to the neonatology department, you can start pumping there. The baby may also practice breastfeeding in the recovery room, with assistance from the nurse. Even after anesthesia, once you've recovered, you can generally begin breastfeeding your child right away. This helps stimulate milk production and allows your baby to benefit from the first food: colostrum. The Mother and Child Center also has lactation consultants who can assist with breastfeeding or offer advice if needed.

Do you plan to bottle-feed? We will help you give your baby the first bottles when you return to the maternity suite. We ask to bring your own sterilized bottle.

## Discharge from our hospital

You will be discharged after 24 hours. The speed of your recovery and the health of your child naturally play a role. Discharge time from the maternity ward is 10:00 AM so you have enough time at home with maternity care.

## Secondary C-Section

Sometimes, it becomes clear during labor that a C-section is necessary. The most common reasons are slow progress in labor and/or risk to the baby. This may occur during dilation or during the pushing stage. There are various situations in which a decision is made for a cesarean section during labor. This is known as a 'secondary' caesarean section.

Because this is an unplanned surgery, preparations often happen more quickly. Since you are not fasting, you will receive medications to neutralize stomach acid. After the operation, your partner and baby will go to the postnatal suite and wait there until the mother returns from the recovery room. Depending on the timing of the operation and recovery, the removal of the bladder catheter and mobilization may occur in a different sequence. Discharge will typically occur 24-48 hours after the operation.

## Back at Home

At home, you will need to continue recovering gradually. Recovery time after a cesarean section is often longer than after a vaginal delivery. Not only are you becoming a mother, but you are also recovering from surgery. Fatigue is a common complaint after a cesarean section, so it's best to listen to your body and rest as much as possible. Accept help from family and friends. Maternity care can answer your questions, assist with some household tasks, and support your partner. The more support you have when you return home, the easier the transition will be, and the quicker you will adjust to your new life situation.

## After the First Few Weeks

After the first few weeks, you will gradually find that you can do more. Heavy lifting (such as garbage bags or heavy shopping bags) is not recommended for the first six weeks, but you can gradually increase your activities, such as light housework and smaller errands. You can shower soon after the operation.

Bathing is not recommended until the bleeding has stopped. If there is any fluid or a small amount of blood from the wound, you can rinse the area in the shower, gently dry it, and cover it with dry gauze to protect your



clothing. You can begin abdominal exercises three months after the operation, once the different layers of the abdominal wall have healed well. During the initial period, you may feel a pulling sensation from internal stitches along the sides of the scar. This is harmless.

Because nerves in the abdominal skin are cut during the bikini cut incision, you may experience numbness around the scar for quite some time. There may also be a particularly sensitive area above this, often extending midway to the navel. Normal sensation in your abdominal wall may return six to twelve months after the operation.

The use of contraceptives (birth control) is the same as after a vaginal delivery. This will be discussed with you during the postnatal check-up. In any case, wait until the bleeding has stopped before resuming intercourse. Upon discharge, you will receive guidelines for home care and a mobilization schedule.

## Possible Complications

Every surgery carries risks, including C-section. Serious complications are fortunately rare, especially if you are healthy. Below are the most common complications.

## Recovery Period

There is a longer recovery period. Recovery after a C-section takes about six weeks. A C-section is a moderate surgical procedure. After this procedure, you may also feel more tired than after a normal delivery

## Anemia

There is bleeding with every delivery, and severe bleeding can lead to anemia. If necessary, your blood iron level will be checked, and iron tablets or a blood transfusion may be required. The risk of excessive bleeding and a blood transfusion is higher with placenta previa.

## Bladder Infection

Occasionally, a bladder infection may occur after a C-section. If necessary, you will be given antibiotics

## Bruising at the wound site

Subcutaneous bruising at the wound site occurs when a blood vessel in the subcutaneous fat continues to bleed. The risk of this is greater if blood clotting during a C-section is abnormal, for example, due to low platelets caused by severely high blood pressure. You may notice it as a bruise under the skin, which almost always resolves spontaneously but can temporarily cause additional pain.



## Infection

Infection of the wound occurs occasionally. The risk is slightly higher after a C-section following prolonged labor. To prevent infection, you will receive antibiotics during the operation

## Thrombosis

There is an increased risk of thrombosis with every surgery and after every delivery. To prevent this, you will receive blood-thinning medications while you are admitted to the maternity ward

## Bladder damage

Bladder damage is a rare complication. The risk is slightly higher if you have had a previous C-section, as there may be adhesions around the bladder. Bladder damage is usually repairable, but you may need a urinary catheter for a longer period

## Abdominal bleeding

Bleeding in the abdomen is a rare complication of a C-section. It is more common with severely high blood pressure, where blood clotting is less effective. Occasionally, a second operation may be necessary

## Delayed bowel function (Ileus)

After a C-section, the bowels need to function properly again. In rare cases, this does not happen or occurs too slowly. Fluid may collect in your stomach and intestines, causing nausea and vomiting. A nasogastric tube may be needed to drain this fluid. Only then do the bowels start working again. Fortunately, these complications are rare

## Possible risks for the baby

During birth, lung fluid is squeezed from the lungs. If this does not happen adequately (for example, during a C-section), temporary breathing problems can occur. Treatment involves supporting breathing. If this is necessary for a longer period, your baby will be admitted to the neonatology unit. Ideally, a C-section is scheduled one week before the due date to minimize the risk of complications.

## Another caesarean section for the next delivery?

After a C-section, it is advised not to become pregnant again within the first year to allow optimal healing of the uterine scar. Whether another C-section is needed depends on the reason for the previous one. This should be discussed during the postnatal check-up to assess the likelihood of a vaginal delivery next time. However, you will always have a medical indication to give birth in the hospital. For more information, refer to the brochure *Giving Birth After a Previous C-Section*.



## Emotional aspects of a C-section

The experience of a C-section varies from person to person. Sometimes, feelings of disappointment or failure may arise. When general anesthesia is used, women do not consciously experience the birth of their child, which can make it more difficult to adjust to the new situation.

If you experience such feelings, talk about them with your partner, friends, or family. Discuss your emotions and any questions you have during the postnatal check-up—such as why the C-section was necessary. This can help you process your emotions. It may help to write down your questions beforehand so you don't forget anything.

A C-section can also be a challenging experience for the partner. Some partners feel helpless or feel they didn't do enough to support you. They may also have been worried about potential complications. If these feelings come up, try to talk about them openly with each other.