# Having a Baby:


## How Pregnancy Affects Women With Limb Loss

*by Sarah Pedersen*

"When I went through my first pregnancy 20 years ago," recalls Diane Thomas, her voice soft and wondering at the memory, "I didn't have anyone to talk to about what to expect with my amputation. I just had to take it one day at a time and find my own way."

Many first-time mothers experience a great deal of anxiety about being pregnant, especially during the first few months. Worries about weight gain, nutrition and the health of their babies are common. Expectant mothers who are amputees are no different, except that, in addition to the usual worries, they have to contend with anxiety about how their prosthesis will fit and how, with their physical limitations, they will care for their newborn.

### Weight gain

Anxiety about how she would manage the weight gain of a normal pregnancy and the fit of her prosthesis topped Stephanie Dwyer's list of worries when she became pregnant last year. "My doctor told me early on, 'You're not eating for two,'" Dwyer says. "She said, 'You're eating for ONE plus about 300 calories a day — and that's about the same as an extra bagel!'"

Sticking with this eating plan helped Dwyer, an above-knee amputee, gain enough weight to ensure a healthy baby while keeping modifications to her prosthesis to a minimum. "One thing that helped me," she adds, "is that instead of craving ice cream every day, I craved *fruit.* And, usually, I don't like fruit."

Dwyer also found that staying active was an important part of managing weight gain during pregnancy. Numerous articles in pregnancy magazines also recommend regular gentle exercise to minimize back pain and help fight fatigue and stress. An obstetrician should be consulted for any specific activity, but most doctors recommend walking and swimming as good forms of exercise.

Walking is an easy way to stay active. It's gentle enough not to cause any injuries to the mother or baby and can be done without specialized training or equipment. Dennis Swigart, CPO, agrees: "Walking is especially good for minimizing the tendency to develop tight muscles in the hips that happen if you allow yourself to become too sedentary." Swigart, former chief of prosthetics at Stanford University and now of Sawtooth Prosthetics and Orthotics in Boise, Idaho, also suggests the following: "Concentrate on taking big steps while walking. Look for softer, shock-absorbing surfaces like grass or the newer running tracks at colleges or larger high schools, and keep your prosthesis fitting comfortably to avoid the risk of skin breakdown."

Swimming, like walking, can be done safely right up until delivery in most cases and was the exercise of choice for Becky Walters, an above-knee amputee and mother of five. "Being in the water

allows you to feel almost weightless, which feels really great after carrying around an extra 30 or so pounds all day. Swimming also can be done comfortably even when your prosthesis isn't fitting real well."

As with their able-bodied counterparts, amputee mothers should use common sense when exercising, keep it gentle, and avoid getting overly tired. Most doctors recommend avoiding activities with a high risk of trauma like skiing or horseback riding. Doctors also caution pregnant women not to exercise to the point of being unable to talk and to STOP IMMEDIATELY if they become nauseated or experience any cramping or bleeding. An obstetrician should always be consulted before starting a new exercise program during pregnancy.

*Sarah Pedersen and 5-month-old daughter, Mira*

## Prosthesis modifications

Weight gain and swelling are most dramatic during the third trimester, but most women will notice changes in their bodies early in pregnancy. With regard to the fit of their prosthesis, above-knee amputees will be most affected due to the larger amount of soft tissue present in the residual limb, but below-knee and arm amputees can also experience swelling, especially late in pregnancy.

"Good communication with your prosthetist at this time is key," warns Swigart. He says any amputee who is pregnant should at least notify her prosthetist during the first trimester, and he recommends scheduling regular monthly visits during the second and third trimesters for routine maintenance and trouble-shooting.

Ensuring good fit and comfort of the prosthesis should be the amputee's and prosthetist's primary concerns during these visits. Modifications to accommodate increased limb volume will vary depending on the kind of socket and suspension system used.

Swigart observes that prostheses with a silicone or gel liner and pin-locking suspension system are probably the easiest to modify. The number and ply of socks worn between the liner and frame can be adjusted as the volume of the residual limb changes. Also, the liner itself can often be changed from thicker to thinner materials to allow for more comfort.

Rigid sockets are more challenging to modify but can be enlarged by grinding down or otherwise opening up the brim. Finally, it is possible to fabricate a temporary socket if the prosthetic limb needs to accommodate very large volume changes. Women who use waist belts for suspension of the prosthesis will need to change to a different system as tight straps across the abdomen are not comfortable during pregnancy and are not good for the baby's health.

During these routine visits, the prosthetist should also check for abnormal wear and tear of components and for proper alignment of the prosthesis. Prosthetic feet, for example, are rated according to the user's weight and activity level, and the extra weight during pregnancy can increase the risk of breakdown in the foot. Swigart warns: "If you ever hear funny noises or if your foot starts to feel different, call your CP immediately."

In most cases, the alignment of the prosthesis will not have to be altered much during pregnancy. The extra weight of the growing baby is carried toward the front of the body, which tends to stabilize the knee joint. Unfortunately, if the woman become too sedentary and develops tight hip muscles, the knee can become unstable, which will require adjustments to the alignment to fix.

Swigart believes that the most important thing to remember about prostheses is that proactive care is better than reactive care. In other words, adjust sock plies or call your prosthetist BEFORE skin problems develop. Once breakdown has occurred, the swelling only increases, drawing you into a vicious cycle. "If you don't accommodate the soft tissue at

the brim," he explains, "it leads to increased swelling, which leads to adductor and gluteal rolls. You then sit on these rolls, which leads to tissue breakdown and more swelling. The swelling lifts you out of your socket, which causes swelling at the end of your residual limb. You lose rotational and side-to-side stability and can have increased toe-drag, and it all results in a higher risk for falls."

Swigart also recommends showering at night and then wearing a shrinker sock to bed to maintain a smaller limb volume for putting the prosthesis on comfortably in the morning. Also, as a pregnant woman's belly gets larger, putting on a lower-limb prosthesis can become more difficult, especially if she pulls into a suction socket using an elastic wrap or cotton sleeve. Swigart recommends teaching a partner how to assist. "Get them involved early," he says.

## Labor and delivery

As the baby's due date approaches, the amputee mother will need to consider whether or not to wear her prosthesis during delivery. Delivery room nurses frequently recommend walking during the early stages of labor to hasten cervical dilation. Also, current thought is that lying flat on your back (as in the olden days) during labor is the most difficult position. Nurses now recommend squatting or semireclining positions to allow gravity to assist the baby's movement, so wearing a prosthesis as long as possible could be helpful.

From his experience working with amputee mothers and attending the birth of his own children, Swigart recommends practicing a variety of positions with a birthing coach or delivery room nurse before labor actually begins. Local hospitals and birthing centers frequently offer childbirth preparation classes, which may also be helpful.

Thomas, a below-knee amputee, wore her prosthesis through the delivery of all three of her children. She says she felt wearing her prosthesis gave her support when she was asked to "bear down."

On the other hand, Walters was unable to wear her prosthesis through delivery because she did not have insurance to cover having a larger socket made. Still, she managed vaginal deliveries of her first three children without too much difficulty and delivered her last two children (twins!) by caesarean section. Her only difficulty with the c-section was that after the surgery, the brim of her socket rode very close to the incision site. She, therefore, recommends any above-knee amputee considering delivery by c-section to ask to have the incision made a little higher if possible.

## After delivery

Ask any mother and she will tell you that after delivery is when the REAL life changes happen. After delivery, the weight-gain process is reversed. The time it takes to return to prepregnancy weight and prosthetic fit will, however, naturally vary by individual. It took Walters two to three months to get back into her prosthesis after the births of her first three children. "Breast-feeding does help with the weight loss," she says, "because you're using so many calories to feed the baby."

She used crutches to get around until she could comfortably fit into her prosthesis again. "Be sure to use crutches because you'll wet your pants if you try to hop!" she says with a laugh.

The biggest difficulty Walters faced on crutches was carrying her infants. She recommends using a sling for hands-free carrying when they are very young and says a frontal carrier is too complicated with all of its adjustable straps and buckles.

Both Thomas and Walters modified their homes to ease the difficulties of mothering with a mobility problem. Thomas kept her children in the same room with her at night, sleeping in a bassinet, until they were 5 months old. "I didn't want to have to worry about finding my leg at night to go to them if they were crying or choking," she says.

Walters concurs. After her twins were born, she says, she lived in the living room a lot. "I had a space set up for changing them and space for them to nap, and the recliner was for me to nap! It just didn't make sense to go to another room to change them." She also recommends getting help from wherever it's offered.

Dwyer wondered whether she'd have enough energy to be a good mother on top of everything else. "Some days I come home from work and

barely have enough energy to give the cat some attention," she said before having her child. "What's it going to be like with a child?" Fortunately, there's hope. New mothers are encouraged to resume regular exercise after delivery to build energy reserves and help relieve stress. Many new mothers say that daily exercise, even if it's only 10 or 15 minutes, helps them to relax and recharge their batteries.

Thomas offers encouragement. "It all seems to work out," she says. "I just seem to find enough energy for the kids. Remember, when a baby first comes, it doesn't move much. You'll grow along with the baby. Just take one day at a time. Each day gives you the energy for the next." Words for every parent to live by.

Anxieties surrounding pregnancy and the arrival of a new baby are common to every new mother, and if you are considering becoming pregnant, don't let these anxieties scare you. Nearly all parents will agree that the rewards of having children are worth it. Having a better understanding of what to expect as an amputee mother will help relieve these anxieties. After talking with other amputees who have had children in her area, Dwyer was ready. "Bring it on, baby," she said. "Let the adventure begin!" ■

## About the Author

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*Sarah Pedersen during pregnancy*