

# JUST THE FACTS ABOUT: HYDROTHERAPY

## When should I get into the water?

A woman should be encouraged to use the labor pool whenever she wants. However, if a mother chooses to get into the water in early labor, before her contractions are strong and close together, the water may relax her enough to slow or stop labor altogether. That is why some practitioners limit the use of the pool until labor patterns are established and the cervix is dilated to at least 5 centimeters.

Some mothers find a bath in early labor useful for its calming effect and to determine if labor has actually started. If contractions are strong and regular, no matter how dilated the cervix is, a bath might be in order to help the mother to relax enough to facilitate dilation. Therefore, it has been suggested that the bath be used in a "trial of water" for at least one hour and allow the mother to judge its effectiveness. Midwives report that some women can go from 1 cm to complete dilation within the first hour or two of immersion. The first hour of relaxation in the pool is usually the best and can often help a woman achieve complete dilation quickly.

## What prevents baby from breathing under water?

There are four main factors that prevent the baby from inhaling water at the time of birth:

1. Prostaglandin E2 levels from the placenta cause a slowing down or stopping of the fetal breathing movements. When the baby is born and the Prostaglandin level is still high, the baby's muscles for breathing simply don't work, thus engaging the first inhibitory response.
2. Babies are born experiencing mild hypoxia or lack of oxygen. Hypoxia causes apnea and swallowing, not breathing or gasping.
3. Water is a hypotonic solution and lung fluids present in the fetus are hypertonic. So, even if water were to travel in past the larynx, they could not pass into the lungs based on the fact that hypertonic solutions are denser and prevent hypotonic solutions from merging or coming into their presence.
4. The last important inhibitory factor is the Dive Reflex and revolves around the larynx. The larynx is covered all over with chemoreceptors or taste buds. The larynx has five times as many as taste buds as the whole surface of the tongue. So, when a solution hits the back of the throat, passing the larynx, the taste buds interpret what substance it is and the glottis automatically closes and the solution is then swallowed, not inhaled.

## Will water help with pain relief?

Laboring in a labor tub can increase a laboring woman's pain tolerance (the duration or intensity of pain that the woman is willing to endure). The hydrostatic pressure of the water relieves some of the discomforts of the contractions. Tubs that maintain the water temperature at or around body temperature (98° F - 100° F) also soothe tired and aching muscles and ligaments - furthering relaxation of the mother. Research shows "the benefits of water immersion include faster cervical dilation resulting in shorter labors, increased relaxation and decreased pain". Cervical dilation can be up to 2.5 cm/hour. Research also shows that water does not enter the vagina during tub bathing. So risk of infection is a non-issue. Research also shows that the hydrostatic pressure from the water on the touch fibers of the skin reduces the perception of the pain from contractions by up to 65%! Buoyancy [a concept discovered by Greek mathematician Archimedes (287-212 BC)] in the labor tub allows for an almost weightless feeling. Women who need to move during labor to enhance progress truly benefit from the ease of movement in a labor tub.



## Other resources for water labor and water birth:

The Complete Book of Pregnancy & Childbirth by Sheila Kitzinger  
[www.waterbirth.org](http://www.waterbirth.org). (much of this FAQ sheet was taken from this site with permission)