



THE DEPARTMENT  
of OBSTETRICS  
& GYNECOLOGY

# Timing of Umbilical Cord Clamping

## When is the umbilical cord routinely cut?

In the past, the umbilical cord was routinely cut about 15-20 seconds after the baby was born. However, since a committee opinion was published by the American College of Obstetricians and Gynecologists (ACOG) in 2012, the normal time for umbilical cord cutting has shifted to about 30-60 seconds after the baby has been born. Delayed cord clamping has been discussed amongst scientists, physicians, midwives, and even the lay media such as the NY Times. In the research studies available on this topic, the general definition of **delayed cord clamping** ranges from 60-120 seconds after birth.

## What are the benefits of delayed cord clamping?

The benefits of **delayed cord clamping** are much more significant in preterm babies (born before 37 weeks) than they are in full term babies, but all babies may achieve some benefit. Studies have shown that the placenta can pass about 80ml of blood to the baby in the 60 seconds after birth and an additional 20ml of blood to the baby in the 2nd and 3rd minute after birth. To provide a comparison, the total amount of blood in a newborn body is about 500ml. This additional blood from delayed cord clamping increases iron levels helping reduce how many babies become iron deficient in the first year of life. This blood also has immune system proteins and stem cells which have benefit to the baby.

In a preterm infant, the baby benefits through:

1. A reduced need for blood transfusion
2. A reduced risk of low blood pressure
3. A reduced risk of anemia (low blood counts)
4. A reduced risk of intraventricular hemorrhage (bleeding into the brain)

## Are there any negative effects of delayed cord clamping?

Possibly. First, in 5 studies, the risk of jaundice (yellowing of the baby's skin caused by breakdown of blood releasing bilirubin) was increased in term infants who had **delayed cord clamping**. These babies had an increased risk of requiring phototherapy to lessen the levels of jaundice.

Secondly, there are some babies who do not start to breathe right away on their own at birth. These babies need assistance from the medical staff to suction excess fluids out of the baby's lungs and stimulate breathing. **Delayed cord clamping** could delay this help. Your provider is trained to identify babies at birth that need assistance and will explain to you why **delayed cord clamping** is not possible in those particular instances.

Thirdly, all of the studies which demonstrate benefit to baby were designed with a protocol requiring the baby to be held lower than the level of the placenta until the cord was cut. As we know from studying other liquids

and the laws of gravity, liquids flow from a higher point to a lower point. Think of two buckets of water hooked together with a hose. Water would flow naturally from the higher bucket to the lower bucket. If we want blood to flow from the placenta into the baby, we encourage that by holding the baby below the level of the placenta. Often, mother's want their newborn baby to be placed directly onto their chest for those first moments of life. If we put the baby up on the chest, we raise the baby higher than the level of the placenta which would allow blood to flow the opposite direction. It becomes a difficult decision between delaying the cord clamping to help give baby more healthy blood but that also then delays intimate bonding moments between mother and baby.

## Is there an alternative to delayed cord clamping?

Yes. It's called umbilical cord milking. This strategy tries to get the "best of both worlds". With this strategy, the provider places the baby directly to the mother's chest for bonding after delivery and then uses their fingers to massage the umbilical cord in a way that pushes the blood from the placenta and up into baby for the 30 seconds after birth. The research that compared cord milking with **delayed cord clamping** found equal benefits in preterm infants including higher blood concentrations, higher blood pressures, reduced need for blood transfusions, and reduced need for extra breathing assistance.

If you have further questions regarding the clamping of your baby's umbilical cord, please ask any of our OB providers. We would be happy to discuss this with you as you plan your birth experience.

This article is not intended to provide specific medical advice and is not to be used or relied on for diagnostic or treatment purposes. Rather, this article is provided as an information resource only to help you better understand your health. It does not create any patient-physician relationship. You are urged to consult with a qualified physician for specific medical advice, diagnosis and treatment and for answers to your personal medical questions.