

Umbilical Cord Blood Banking

Cord blood is the blood in a baby's umbilical cord that passes nutrients from mother to child. When the baby is born the umbilical cord is cut, since the baby will start feeding for nutrition.

But umbilical cord blood is special. It has the red blood cells, white blood cells, plasma, and platelets of regular blood, but it also contains hematopoietic stem cells, which create new blood cells

What Cord Blood Can Do

For children who need bone marrow transplants, cord blood works just as well, and avoids the painful marrow extraction process. Plus, the stem cells in cord blood offer a better chance of a donor match than bone marrow donations.

Frozen cord blood has been used in donations up to ten years after it was donated, with no apparent quality deterioration. This is an advantage over regular donated blood, which sometimes spoils after one year.

Who it helps?

Conditions such as sickle cell diseases, Hodgkin's disease, lymphoma, leukemia, and other cancers can be treated with bone marrow or cord blood transplants. African Americans and other minorities have a harder time finding bone-marrow matches, and cord blood gives them a much better chance of treatment.

Can it Hurt?

The process of extracting cord blood does not hurt the infant, since the umbilical cord has no nerves in it. There is a chance that a genetic disease in the blood could be passed onto a recipient. All cord blood is therefore tested for common genetic disease. The donor family is informed of the results, and only safe cord blood is kept.

Private vs. Public

Public cord blood banks work similarly to other blood banks. Instead of taking a pint of blood from an adult's arm for use later, the otherwise-discarded cord blood is saved for a child who needs a bone marrow transplant. There is no fee in saving the cord blood, but the donor family does not get to claim the blood later if it needs it.

Private cord blood banks store an infant's cord blood for use of the infant's family only. The cost can be up to \$1,800 to donate it, and \$150 per year to store it. The odds of a family needing it are low, and no other family can benefit from it.

There are only 25 accredited cord blood facilities in the US, so one may not be in your area. Check with your birth hospital or a university hospital for information on how you can donate, or visit the [national cord blood website](http://nationalcordblood.org).

The American Academy of Pediatrics officially encourages families to donate their newborn's cord blood to a public cord blood bank. It discourages private cord blood banking except where the infant has an older sibling with a condition that will require a bone marrow transplant.

