

The Placenta and Umbilical Cord :

- all fetuses need moisture and protection
(provided by the amnion...develops into the “amniotic sac” and its fluid cushion around the fetus)
- all fetuses need oxygen and nutrition
(provided by the yolk sac in many animal species, ours is small, and serves only to nourish us until the placenta is developed and working. The placenta develops from the chorion membrane, and is a blood vessel rich organ that absorbs nutrients, oxygen, and whatever else is in moms blood. It also makes progesterone and estrogen to prevent menstruation and other ovulations)

The umbilical cord connects the fetus to the placenta. Nutrients diffuse across the placenta and into the fetal bloodstream. Fetal wastes move through the umbilical cord and diffuse into moms bloodstream. There is NO mixing of the two (possibly different) types of blood.

The umbilical cord blood is rich in stem cells, and may be saved by the new parents in case they are needed to treat conditions their child might have or develop later in life.