

The Placenta

- The placenta consists of the ENDOMETRIUM (lining of uterus) and the AMNIOTIC MEMBRANE + CHORIONIC VILLI.
formed from mother (pointing to ENDOMETRIUM)
formed from the fetus. (pointing to CHORIONIC VILLI)

- The placenta is an ORGAN → has specific function.

* General Function is to keep the embryo/fetus alive by transferring nutrients in + wastes out.

★ The transfer of substances between mother + fetus is due to DIFFUSION
→ the blood of the mother + the fetus DO NOT MIX!!!

SPECIFIC FUNCTIONS:

1. Transfer wastes out of fetus into mother's blood (wastes = urea, CO_2)
2. Transfer of nutrients, O_2 , water into the fetus from the mother.
3. Barrier to maternal hormones.
4. Barrier to some pathogens.

5. Transfer of immunity (antibodies) from mother to fetus.
6. The placenta produces progesterone + HCG to "maintain pregnancy" (the corpus luteum only lasts ~10 wks)