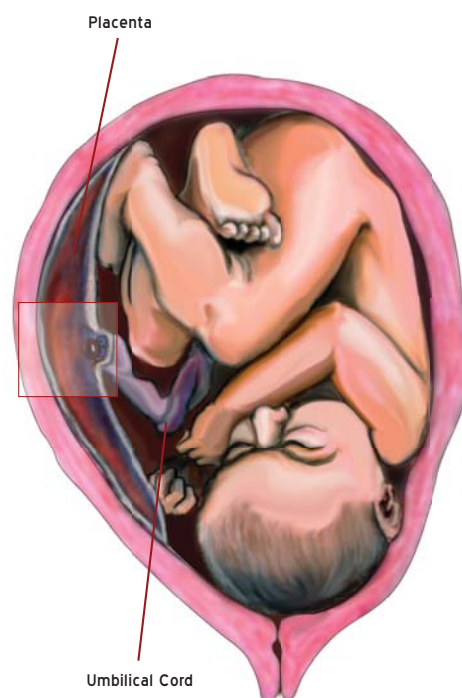
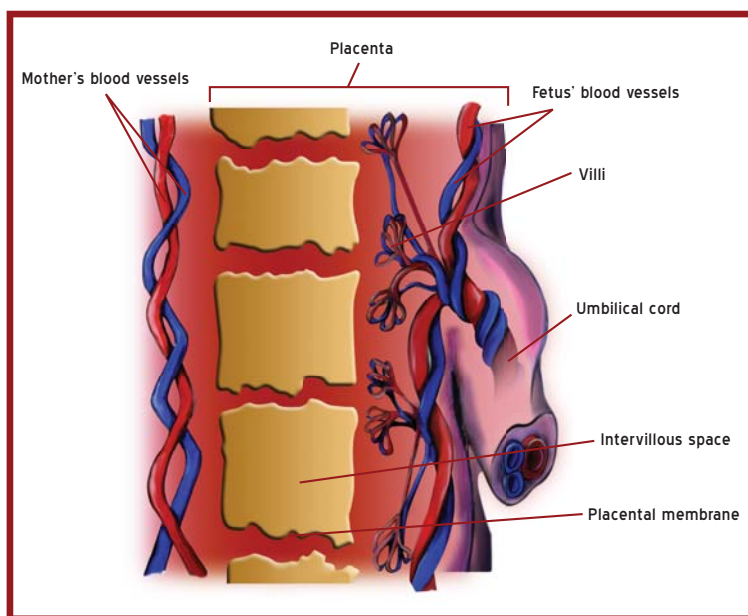




Fact Sheet

How Nutrients, Oxygen, and Other Substances Reach the Fetus

Nutrients, oxygen, and other substances (e.g., alcohol) in the mother's bloodstream cross the placental membrane into the fetus's blood vessels through villi, and then pass through the umbilical cord:ⁱ



- The fetus's blood alcohol level can equal or exceed that of the mother due to the fetus's small size.ⁱⁱ
- The fetus's blood alcohol level remains high for a longer period of time, because of his or her inability to break down alcohol the way an adult can.ⁱⁱ
- Prenatal alcohol exposure can harm the fetus at any time during gestation, with the most extreme effect being death.ⁱⁱ
- There is no known safe amount of alcohol use during pregnancy.ⁱⁱ

i. The Merck Manuals. (2007, May). *Drug use during pregnancy*. Retrieved from <http://www.merck.com/mmhe/sec22/ch259/ch259a.html>

ii. Substance Abuse and Mental Health Services Administration. (2007). *Effects of alcohol on a fetus*. Retrieved from http://www.fasdcenter.samhsa.gov/documents/WYNK_Effects_Fetus.pdf