



## In the Womb



A baby grows, is protected, provided with nutrients and has its wastes removed in the safety of the womb, or uterus. The uterus is an area within the lower part of a woman's abdomen inside the protective bones of the pelvis.

In a non-pregnant woman, the pear-shaped womb is 7.5 cm long and 4.5 cm wide and has an average mass of 60 g. Then as the baby develops and grows, it enlarges to be as big as a watermelon or around 30 cm long and can have an increase in mass up to 900 g.

The uterus has a thick, highly vascular (lots of blood vessels) wall or lining that provides the initial energy for the embryo. The uterine wall is where the embryo burrows into and attaches before the placenta and umbilical cord are formed. The placenta connects the foetus (a developing baby after 8 weeks of pregnancy) to the uterine wall. It starts to form as soon as the embryo implants into the uterine wall and at around 12 weeks of pregnancy, it is complete. The uterus is a vital organ that provides the foetus with oxygen, food and water provided by the mother and takes away wastes like carbon dioxide.



The foetus is surrounded by a clear, transparent liquid called amniotic fluid. This solution acts as a cushion if the mother is bumped or jolted, allowing the baby to move around. The baby also swallows the amniotic fluid which helps to create the digestive system and first urine and faeces.

The tube that connects the baby to the placenta is the umbilical cord. It forms from the embryo at around five weeks of development. When the baby is born, the umbilical cord is 50 cm long. It contains two main blood vessels (an artery and a vein) that connects the foetus with the mother and allows for the transfer of vital nutrients and removal of dangerous wastes.

At the opening of the uterus is the cervix. The cervix is a narrow muscular canal that is around 8 mm in width (this has to increase to around 100 mm in order to give birth). During pregnancy, it is sealed with a mucus plug to prevent exit and entry from the uterus. The cervix also provides a place for the foetus's head to rest during the early stages of the birthing process.

The vagina is a muscular tube that joins the uterus to the outside world, where it opens up to the vulva. The vagina's main function in reproduction is to allow the male's penis to deposit sperm and as an exit point for the baby.

