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implantation is the stage of **pregnancy** at which the embryo adheres to the wall of the **uterus**. At this stage of **prenatal development**, the **conceptus** is called a **blastocyst**. It is by this adhesion that the embryo receives oxygen and nutrients from the mother to be able to grow.

In humans, implantation of a **fertilized ovum** is most likely to occur around nine days after **ovulation**; however, this can range between six and 12 days.

Implantation window

The reception-ready phase of the **endometrium** of the uterus is usually termed the "implantation window" and lasts about 4 days. The implantation window occurs around 6 days after the peak in **luteinizing hormone** levels. With some disparity between sources, it has been stated to occur from 7 days after ovulation until 9 days after ovulation, or days 6-10 postovulation. On average, it occurs during the 20th to the 23rd day after the **last menstrual period**.

The implantation window is characterized by changes to the endometrium cells, which aid in the absorption of the uterine fluid. These changes are collectively known as **the plasma membrane transformation** and bring the **blastocyst** nearer to the endometrium and immobilize it. During this stage the blastocyst can still be eliminated by being flushed out of the uterus. Scientists have hypothesized that the hormones cause a swelling that fills the flattened out uterine cavity just prior to this stage, which may also help press the blastocyst against the endometrium. The implantation window may also be initiated by other preparations in the endometrium of the uterus, both structurally and in the composition of its secretions. Implantation is initiated when the blastocyst comes into contact with the uterine wall.