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PHARMACOLOGY

 Implantation is the stage of [pregnancy](https://en.wikipedia.org/wiki/Pregnancy" \o "Pregnancy) at which the embryo adheres to the wall of the [uterus](https://en.wikipedia.org/wiki/Uterus" \o "Uterus). At this stage of [prenatal development](https://en.wikipedia.org/wiki/Prenatal_development" \o "Prenatal development), the [conceptus](https://en.wikipedia.org/wiki/Conceptus" \o "Conceptus) is called a [blastocyst](https://en.wikipedia.org/wiki/Blastocyst" \o "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](https://en.wikipedia.org/wiki/Human_fertilization" \o "Human fertilization) [ovum](https://en.wikipedia.org/wiki/Ovum" \o "Ovum) is most likely to occur around nine days after [ovulation](https://en.wikipedia.org/wiki/Ovulation" \o "Ovulation); however, this can range between six and 12 days.

The initial phase of the implantation process is "adplantation". This first phase requires the newly hatched blastocyst to loosely adhere to the endometrial epithelium, often "rolling" to the eventual site of implantation where it is firmly adhered. This process requires both the blastocyst adhesion interaction with the endometrium during the "receptive window".

Subsequent development of the placenta allows maternal support of embryonic and fetal development. If implantation has not proceeded sufficiently during the menstrual cycle to allow hormonal feedback to the ovary, then the next cycle may commence leading to conceptus loss. There is also evidence, from animal models, that a conceptus with major genetic does not develop or implant correctly leading to their loss during the first and second weeks of development.