**NAME: AKINBODE OLAJUMOKE ADESOLA**

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## **What is implantatio**n?

Fertilization in humans. The sperm and ovum unite through fertilization, creating a conceptus that (over the course of 8-9 days) will implant in the uterine wall, where it will reside over the course of nine months.

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

Once in your uterus, this little bundle of cells has to attach, or implant, into your uterine wall. This step — known as implantation — triggers rising levels of all the pregnancy hormones (estrogen, progesterone, and hCG, or human chorionic gonadotropin).

If implantation doesn’t happen, your uterine lining is shed in your normal monthly period. But if implantation does occur, the pregnancy hormones cause the placenta and the embryo to develop and your uterine lining to stay in place and support your pregnancy.

**Possible signs and symptoms of implantation**

* **Bleeding**

Up to [25 percent](https://www.acog.org/Patients/FAQs/Bleeding-During-Pregnancy) of women experience bleeding or spotting in the first trimester and implantation is one cause of first trimester bleeding.

This bleeding can be confusing, because it may happen around the time that your regular period would start. Most commonly though, it will occur a few days to a week before you expect your menstrual period.

There are other differences that can help you determine whether you are experiencing implantation bleeding or your period:

* implantation bleeding is most likely to be light pink or brown (as opposed to the bright or dark red of your period)
* implantation bleeding is more like spotting than an actual flow of blood

This spotting may occur once, or last for a few hours, or even up to three days.

* **Cramps**

It’s no secret that early pregnancy causes a rapid shift of hormones. More specifically, implantation is a trigger for the hormone surge — that’s why you can’t get that second pink line on a home pregnancy test until after implantation.

And the changing hormonal tide can also cause [cramping](https://www.healthline.com/health/pregnancy/implantation-cramping). Furthermore, there’s a lot going on in your uterus as the fertilized egg implants and begins to grow.

* **Discharge**

You may notice some cervical mucus changes around the time of implantation.

During ovulation, your cervical mucus will be clear, stretchy, and slippery (sort of like egg whites). After implantation occurs, your mucus might have a thicker, “gummier” texture and be clear or white in colour.

And in the days of early pregnancy, rising progesterone and estrogen may cause your mucus to become even thicker, more profuse, and white or yellow in colour.

* **Bloating**

Rising [progesterone](https://www.healthline.com/health/progesterone-function) (which happens in early pregnancy) slows your digestive system down. This can make you feel bloated.

* **Tender breasts**

After implantation, levels of hCG, estrogen, and progesterone all increase rapidly. This can cause your breast to feel very sore and to swell.

* **Nausea**

This is the most famous of the early pregnancy symptoms: nausea, aka “morning sickness”. Increased levels of progesterone following implantation can make you feel nauseous. But again, this most commonly occurs around 4 or 5 weeks of pregnancy (about the time you miss your period).

Progesterone slows down your digestion, which can contribute to nausea. Rising hCG levels and a more sensitive sense of smell can make the problem worse.

* **Headaches**

The rise in pregnancy hormones level (particularly progesterone) can also give you headaches following implantation.

* **Mood swings**

Estrogen and progesterone, as well as hCG, increase very quickly following implantation. This can make you feel “off” or moodier than usual.

### **Implantation dip**

###  “implantation dip” refers to a one-day decrease in your basal body temperature that can occur as a result of implantation.

If you’ve been [tracking your basal body temperature (BBT)](https://www.healthline.com/health/pregnancy/basal-body-temperature) to help identify your most fertile days, you likely already have a log of your daily BBT over the course of a few months.

Typically, a woman’s temperature is lower before ovulation, and then increases, and then drops again before her period starts. If you get pregnant, your temperature remains elevated.

Some women seem to experience a one-day drop in temperature around the time of implantation. This is different than the drop in temperature that means your period is coming — in the case of an imminent period, your temperature would stay low.

In the case of implantation dip, your temperature drops for one day and then goes back up. It’s thought that this might be due to a rise in estrogen.