Your Menstrual Cycle

The average length of the menstrual cycle is 28 days, although this can vary in women with ovulation disorders or luteal phase disorders. In a woman with regular cycles, four phases will occur within this 28 day period. They are: menstruation, the follicular phase, ovulation, and the luteal phase. Each month, this cycle will result in either pregnancy or menstruation.

The biological goal of the menstrual cycle is conception. Your brain receives a signal to release hormones for ovarian stimulation. Follicle growth will begin and once mature, an egg will release from the follicle, traveling down the fallopian tube to the uterus. The egg will either be fertilized by sperm and implant into the lining of the uterus, or absorbed by the body. At this point in the cycle, hormones indicate whether or not pregnancy has occurred. In the absence of pregnancy, the lining of the uterus will shed and bleeding, known as menstruation, will last approximately 5 days. The first day of full red flow marks cycle day 1, commonly referred to as CD1.

Days 1-5: Menstruation

If the egg is not fertilized, estrogen and progesterone hormone levels in your body will begin to drop. The lining of the uterus, called the endometrium, will shed and bleeding will begin through the cervix and vagina. This bleeding lasts an average of five days and consists of blood, mucus, and tissue.

Days 1-13: Follicular Phase

Simultaneously, the pituitary gland located at the base of your brain produces increasing amounts of two hormones – follicle stimulating hormone (FSH) and lutenizing hormone (LH). FSH signals your ovaries to stimulate approximately 10 to 20 egg-containing follicles.

Around day five, increasing amounts of LH are released to help these follicles mature. As these follicles in the ovaries mature they begin to produce a hormone of their own called estrogen. Estrogen works to stimulate more LH production which continues the maturation process of these follicles.

Around day eight of your cycle, it becomes evident that one (or few) of the follicles is dominant and will likely ovulate a mature egg. The other follicles will begin to shrivel and disintegrate.
Around the day twelve, the increasing level of estrogen is also causing the lining of your uterus to thicken as it prepares for the implantation of the ovulated, fertilized egg.

**Days 10-18: The Ovulatory Phase**

An increase in the luteinizing hormone (LH) level causes the mature follicle to burst and ovulate the egg, usually around day 14. The egg travels from the ovary down the fallopian tube where it awaits potential fertilization by a man’s sperm.

The best days for conception generally occur from days 11 to 17 – the days leading up to and immediately following ovulation. If you are trying to conceive, it is best to have sexual intercourse every other day around this time. For example: Days 10, 12, 14, and 16 might be the best time to have sex to get pregnant. Sperm can live for approximately 48 hours inside the woman, so if you ovulate within this time frame and have no other fertility concerns, a pregnancy is likely to result. Having sex more frequently than every other day is detrimental to the quantity and quality of the sperm. Allowing one day to rest in between ensures sperm has time to build up and deliver greatest pregnancy-achieving potential.

**Days 15-28: The Luteal Phase**

The follicle from which an egg was ovulated then takes on an important role for impending pregnancy. Called the corpus luteum, this follicle secretes hormones that allow the uterine lining to thicken and encourage growth of an embryo, should the fertilized egg implant. Implantation occurs around day 20 of a regular menstrual cycle. If pregnancy occurs, the corpus luteum will sustain the uterine lining and pregnancy until the placenta develops.

If the egg is not fertilized and implanted, the LH (luteinizing hormone) and FSH (follicle stimulating hormone) levels will decrease, and as a result the corpus luteum will deteriorate. Around day 26 of your cycle, the uterus will receive signals that it is time to prepare for menses and shedding of the lining.

**Ovulation Signs and Symptoms**

Several physical signs of ovulation may be present approximately half way through your menstrual cycle. For example, your cervical mucus will increase and appear similar to the consistency of raw egg whites. This type of cervical mucus optimizes the chance of sperm reaching the mature egg for fertilization.
If you are charting your basal body temperature (BBT), you will notice a slight rise in temperature by approximately 0.4 degrees Fahrenheit. This increase should be maintained for about 14 days and will remain high if pregnancy is achieved.

Other potential signs of ovulation can include light spotting, slight cramping, breast tenderness, abdominal bloating, and increased sex drive. These symptoms are not apparent for all women and often mimic symptoms of impending menstruation. Women with ovulation disorders may experience false ovulation symptoms similar to those listed above. It is important to consult your OB-GYN or fertility doctor to confirm ovulation.