

The right time: When sperm and egg meet

Jennifer Newton Reents

You are so ready to have a baby, that it makes you crazy, and besides, getting pregnant should be easy, right? So how do you make it happen? Well, of course, we know you know HOW, but when it comes to getting that sperm and egg together, believe it or not, it can get a little tricky.

Ovulation facts

In a typical 28 day menstrual cycle, ovulation usually occurs around Day 14 -- with Day 1 as the first day of your menstrual bleeding, says Fady I. Sharara, MD, medical director of the Virginia Center for Reproductive Medicine and associate clinical professor at George Washington University School of Medicine. While the egg "fertilization window" is short he says (just 12 to 24 hours), sperm can live up to five days -- and sometimes longer -- in the cervical mucus, which is most abundant close to ovulation.

"Every woman who is attempting to conceive should know whether her cycles are regular and whether she experiences the 'ovulation signs,'"he says. "These signs include increasing cervical mucus close to ovulation, and what is called *Mittelschmerz*, or the midcycle cramping that some, but not all, women feel."

While everyone is different, Randy S. Morris MD, a board-certified reproductive endocrinologist and associate clinical professor at the University of Illinois at Chicago, says most women have menstrual cycle lengths between 26 to 30 days. "Ovulation in these women is usually occurring between Day 12 and Day 16," he explains. "The first part of the cycle from menstruation until ovulation is called the follicular phase. The second part from ovulation until the next menstruation is called the luteal phase. The luteal phase is relatively constant at around 14 days."

Dr Morris cites a study published in 1995 in the *New England Journal of Medicine* which looked at the timing of intercourse relative to ovulation. He says the following conclusions could be made from this study:

- Pregnancy can be achieved when intercourse occurs up to five days prior to ovulation. At three to five days before ovulation, the probability of conception averaged around 10 percent.
- The highest chance for pregnancy occurs when intercourse happens two days before, one day before or on the day of ovulation. On those days, the probability of pregnancy averaged about 35 percent. Statistically, there is no better chance for conceiving on any of those three days.
- The probability for pregnancy drops off significantly (maybe to zero) the day after ovulation.
- The frequency of intercourse made little difference in the probability of conception.

For couples actively trying to conceive, Dr Morris suggests the following:

First, figure out the length of your cycles from the first day menstruation begins until the next first day of bleeding -- for example, 26 or 29 days.

Next, subtract 14 days for a good estimate of when you usually ovulate. (e.g. 26-14=12 and 29-14=15. Ovulation in this example would be expected between day 12 and 15 of any given cycle).

Then, have intercourse every two to three days leading up to ovulation (In this example, intercourse on days 10, 12 and 14 would maximize the chance for conception. Couples who want to have intercourse more often such as every day, may do so without compromising their chances for success, he says. Some doctors suggest couples have sex every other day.

Knowing when

There are a number of ways to see if you are ovulating, from keeping track of the changes in your cervical fluid, to charting changes in your basal body temperature. There are also ovulation predictor kits (OPKs) on the market today that test for signs of ovulation by looking for hormonal changes in urine and even changes in the salt of the saliva brought on by hormonal changes.

William B Hummel, MD, co-founder of the San Diego Fertility Center in San Diego, California, says if you have an irregular cycle, urine OPKs that test for a hormone surge of luteinizing hormone (LH) help women identify their most fertile time. "Generally, the most fertile time of a woman's cycle is the day after the LH surge. This fertile period of time may be associated by an increase in one's basal body temperature the day after ovulation," he says.

Dr Sharara says many women chart their basal body temperature (BBT), which is done by taking your temperature as soon as you wake up -- before getting out of bed or doing anything -- and recording it on a special chart. "Impending ovulation is often associated with a drop in the temperature from the baseline, followed by an increase the next day," he says.

Temperature charting does not predict ovulation, says Dr Morris, but it can detect ovulation only after it has already occurred. "There is no reliability in predicting ovulation. It is useful for women with irregular or infrequent menstrual cycles to determine if they are ovulating," he says.

Today, says Dr Sharara, the most "scientific" approach involves using a urine-based OPK. "When the kit turns 'positive' that implies that ovulation will occur within 24 hours," Dr Sharara notes. "Therefore intercourse has to be timed as close to ovulation as possible to achieve the highest chances at conception."

Know thyself

Lawrence Werlin, MD, FACOG, reproductive endocrinologist and founder and director of the Coastal Fertility Medical Center in Irvine, California, says women need to understand what changes occur in their own cycles and to understand what those changes mean. "For example, when her (cervical) mucus begins to change, and become thin (watery), clear and sticky, she is close to ovulation," says Dr Werlin.

For Leslie, a frequent poster on the [Pregnancy & Baby Baby Dust message boards](#) (who is now expecting a child in February 2004), taking her BBT seemed to help her become familiar with her cycles, especially since she was taking fertility drug injections to help her ovulate. "I had high temps after (ovulation) this cycle, similar to my other medicated cycles except I had one day with a 98.8 temp which was the

highest temp I had ever had in all my temping. I thought that was rather unusual. At 11 and 12 days past ovulation, I had spotting, which was very unusual as I never have spotting before (my period). It was strange too. I only had it in the morning and it was always brown."

Your healthcare provider will also be able to guide you in the right direction when it comes to trying these techniques. (For more fertility tips, click [here](#).)

Dr Sharara says it is also important your partner be tested, to ensure he doesn't have a low sperm count. "Male-related infertility accounts for 40 percent of all infertility causes, and in an additional 20 percent, both partners have fertility problems," he says.

When you decide to take a pregnancy test, try to remain positive, even if you get a negative result, advises Hollie, a visitor to the Pregnancy and Baby message boards who has been trying to conceive more than six months. "Do the best you can -- baby dance (have sex) at the right time and then let it go," she says. "Get involved in something -- work, being romantic with your husband, a hobby, reading, a sport. Something to take your mind and pressure off your body."

And remember that the best is yet to come. "Think of the surprise when you finally get that (positive pregnancy test) and you weren't even stressing about it," says Hollie. "Your body will listen and respond when it knows you can handle a baby." ❀