

### ***Ovulation Timing by LH Measurement***

The chances of becoming pregnant are better if sperm are deposited in the woman on the day of ovulation when an egg is released from the ovary. There are various ways to determine the day a woman ovulates. In the past, daily basal body temperature measurement was used to determine the day of ovulation. The advent of ultrasound has enabled physicians to determine the size of the ovarian follicle, which contains the developing egg. Unfortunately, it does not predict when ovulation is going to occur. Since 1982 we have utilized the most accurate method of determining when ovulation is occurring by measuring the luteinizing hormone (LH) that causes ovulation. From 1982 through 1984 we measured the hormone daily in a blood sample beginning a couple of days before we thought the woman was going to ovulate. Since December of 1984, patients have been able to measure the hormone in the urine, beginning a couple of days before expected ovulation. The day you note a big rise in the LH hormone represents the day before ovulation should occur.

### ***Methods to Determine LH in Urine***

#### **I. Laboratory LH Testing**

A. A urine sample is brought to the laboratory daily beginning a couple of days before the day we expect ovulation to occur. For example if you usually have a 28 day cycle, you would start coming in for the urine LH test on day 12 of your cycle. If you have a 30 day cycle you would begin testing on day 13-14.

B. The hours to come in to have your urine tested for LH are as follows

University of Utah Andrology Laboratory  
675 Arapeen Drive, Suite 205  
Salt Lake City, UT 84108

Lab hours:

Monday-Friday 7:30 AM - 4:30 PM

Saturday-Sunday 7:30 AM - 10:30 AM

Holidays: Please check in advance to see if the lab is open and if so the hours.

**For morning testing, bring urine to lab (or collect at laboratory) from 8:00 AM to 9:00 AM, if possible**

**For afternoon testing, bring urine to lab (or collect at laboratory) from 2:00 PM to 3:00 PM, if possible**

C. To obtain the results of your urine LH test we will have you call the same lab the same day that you brought in your urine sample. Please be sure to take the phone number when you come in with your urine sample. You may wait for the result or call within the hour.

D. Advantages of Laboratory Test:

1. Laboratory technicians are familiar with the test and therefore will probably have a more accurate reading of the result.
2. If there is a problem with your cycle and a question about your

surge it is easier for us to answer questions if the test has been done in our laboratory.

E. Disadvantages of Laboratory Test:

1. May be less convenient..
2. More expensive.

II. Home LH Testing

A. Ovuquick One-Step - We ask all women to use the urine home kit to time the LH surge (ovulation) to do the test twice a day. Please follow the instructions below for the maximum chance for success.

1. The kits can be purchased from our laboratory. You will get a form at the time of purchase for you to send to your insurance company.
2. Be sure to use only the Ovuquick one-step test. While somewhat more expensive, this kit is far more accurate than any other kit available on the market. Virtually all of the current kits available have been extensively tested in our laboratory and we have come to the conclusion that only Monoclonal Antibody kits (Ovuquick) are accurate enough to give results that will be worth your time and effort.
3. Bring in your urine tests each time you have an insemination. We want to be sure that the insemination is being done at the right time and therefore we would like to see your Ovuquick sticks each time that you come in for the insemination.
4. **We would like you to do a urine test both in the morning and again in the early afternoon beginning a couple of days before you think that you are going to ovulate.** Be sure to start early enough that you have at least one day where your tests are negative. For example, if you usually have a 28 day cycle, you would start the urine LH test on day 12 of your cycle. If you have a 30 day cycle you would begin testing on day 13-14. If you surge on the morning sample, call us as soon as possible and the **insemination will be approximately 24 hours later.** If you surge in the afternoon, call us as soon as possible and the insemination will be the next day in the afternoon. On weekends and possibly some weekdays we will only be able to do morning inseminations and will, therefore, do your insemination in the morning. **In summary, morning LH surges will indicate an insemination the next day in the morning, and afternoon surges will indicate an insemination the next day in the afternoon.**
5. As stated in the instructions, **when the test line is darker than the reference line**, call the Andrology secretary for an appointment (581-3740). It is important to call the day your urine shows an LH surge. However, if you cannot call before 4:30 PM, call the next morning after 7:30 AM.

6. In some women (5-10%) the test stick will only match in color and then the next day the color will be even lighter. If this happens to you, call our laboratory at 581-3740 and talk to one of the technicians.

**NOTE**

You should run the test between 7 and 9 AM and again from 2 to 3 PM if possible. Do not urinate for 2-3 hours before you collect your urine for testing. If your urine looks as clear as water, wait 2-3 hours and then collect another urine for testing. **DO NOT DRINK EXCESSIVE AMOUNTS OF LIQUIDS** while you are testing your LH levels. This could alter the results of the test.

**B. Advantages of Home Kits**

1. Convenience
2. Less expensive.

**C. Disadvantages**

1. Accuracy - The accuracy of the test may be lower and the sensitivity less if it is difficult for the woman to conduct the test properly.
2. It is more difficult to answer your questions if we have not been able to see the actual result. We cannot be responsible for your interpretation of the home LH test. We are still here to help, however, and will answer any questions we can.