A Success Story

The following is a true story of how the Fertility Profile helped a ZRT client

Mary* was a 35 year old woman trying to conceive for six months without success. Her cycles were regular, but heavier than in the past. She was experiencing fatigue, weight gain, and reported feeling "just off." Her doctor found nothing unusual, and suggested ZRT's Fertility Profile to see if there were underlying hormone imbalances.

ZRT's Fertility Profile revealed her testosterone was elevated, which could be associated with PCOS. The test also revealed low progesterone, which suggested a lack of ovulation and an inability to sustain a pregnancy. Additionally, her TSH was slightly elevated and her TPO antibodies were positive suggesting hypothyroidism and autoimmune thyroid disease.

Based on these hormonal imbalances, her doctor modified her diet, prescribed thyroid support, supplemental progesterone, and a medication to help lower her testosterone. After one month her ovulation predictor kits were more positive, and her cycles had begun to lighten. In three months she became pregnant, and nine months later she delivered a healthy baby boy.

*Patient's real name has not been used.

Why Test?

Many women become pregnant easily, but for others this may require some assistance. ZRT's Fertility Profile can help if you:

- Have hormonal symptoms
- Have been trying to conceive for more than six months
- Are in your mid 30's or older
- Had difficulty sustaining pregnancy in the past
- Know infertility runs in your family
- Want to assess your fertility status

Too often women struggle wondering why they are unable to conceive while feeling as if the clock is ticking. Testing can help you find out if more assistance is needed from a specialist or give you peace of mind when conceiving is taking longer than you had hoped.

ZRT LABORATORY

1-866-600-1636 | www.zrtlab.com

Problems with Fertility?

HELP STARTS HERE

The Problem of Infertility

If you've been trying to get pregnant without success, you are not alone. A large number of women are having difficulty trying to become pregnant. The most recent National Survey of Family Growth showed that in the U.S. the average infertility rate was 21.4% in married women age 30-44 years who had not yet had any children. Further, the study also found that a staggering 32.2% of married women had difficulty sustaining a pregnancy (known as fecundity).

Infertility by Age Group
(married women, no previous child)

Age group	Infertility	Impaired Fecundity
30-34	16.9%	24.5%
35-39	22.6%	33.9%
40-44	27.4%	42.8%

While nearly half of infertility in women can be attributed to physical causes such as not producing an egg (ovulatory failure 21%), damage to the tubes that carry the egg to the uterus for fertilization and implantation (tubal damage 14%), and problems with the uterine lining (endometriosis 6%), a massive 28% of cases are left unexplained. In the absence of a physical cause, many cases of female infertility may be explained by something as simple as a hormonal imbalance, which can be detected by hormone testing and easily corrected by diet, lifestyle changes, or hormone therapy.

Hormonal Causes of Infertility

Common hormone-related causes of female infertility often involves the following scenarios:

Low Progesterone

Progesterone produced by the ovaries during the second half of the menstrual cycle is essential for preparing the uterus for implantation of the fertilized egg. In some patients, ovulation and fertilization of the egg may occur normally but progesterone is not produced in sufficient amounts to sustain pregnancy.

Thyroid Disorders

Low levels of the thyroid hormones fT3 and fT4 may prevent ovulation, which can be indicated by no periods or irregular cycles. Autoimmune thyroid issues, resulting in elevated levels of antibodies to the thyroid gland can increase the risk of miscarriages.

PCOS (Polycystic Ovary Syndrome)

PCOS affects between 6% and 15% of women during their reproductive years. PCOS is a common cause of ovulation problems, weight issues, and miscarriages. Once PCOS is recognized and treated, many women are able to become pregnant.

Low Egg Reserve

Declining egg production is the primary reason for the age-related decline in fertility. A low egg reserve can also be caused by premature ovarian failure.

Stress

Stress affects ovulation due to its effect on the endocrine system. High cortisol can inhibit ovulation, where low cortisol can affect the immune changes necessary for implantation to occur. Stress may also lead to the development of endometriosis, which is found in more than 50% of women with unexplained infertility.

ZRT Laboratory's Fertility Profile

We offer a simple, cost-effective test that can identify treatable hormonal imbalances and point to other serious health issues that affect fertility. Early detection can help your health care provider address these issues, and can also identify the need for more specialized care without spending additional time attempting to become pregnant through traditional methods.

We understand your busy schedule, which is why ZRT developed simple and convenient methods for testing in the privacy of your own home, at the optimal time. This is important as collection must be done on two different days during your cycle. ZRT's test eliminates inconvenient, stressful, and time consuming trips to a blood draw clinic.

ZRT's fertility profile tests 15 distinct hormones to help assess fertility. Follicle Stimulating Hormone (FSH) and Luteinizing Hormone (LH) are tested at the beginning of your cycle. During this time the following can be seen in women with infertility:

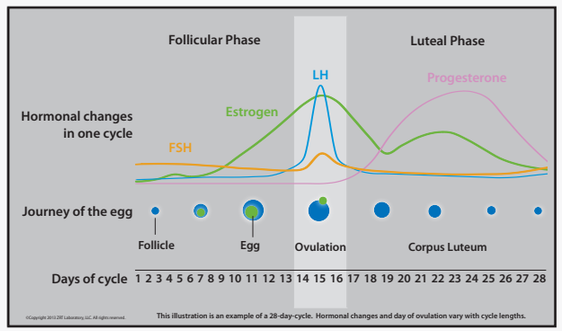
- High FSH on day 3 reflects low egg reserve
- High LH relative to FSH can indicate PCOS

Near the end of your cycle, Estradiol (E2), Progesterone (Pg), Testosterone (T), DHEA-S (DS), Cortisol (4x), Sex Hormone Binding Globulin (SHBG), and thyroid hormones (free T4, free T3, TSH, TPO) are measured. During this time the following can be seen in women with infertility:

- Low estradiol and progesterone are typically seen in women with low egg reserve
- The ratio between estradiol and progesterone can indicate no ovulation or luteal phase deficiency
- High levels of DHEA-S and Testosterone can suggest the presence of PCOS
- Thyroid problems can suppress ovulation and contribute to early miscarriages
- Abnormal cortisol patterns reflect stress, which can affect your ability to conceive

Vitamin D is available as an optional test with the Fertility Profile. Recent research has shown women with low levels of vitamin D are less likely to become pregnant after in vitro fertilization.

The chart shows the normal fluctuations in estradiol, progesterone, LH, and FSH during a menstrual cycle, with corresponding changes in the ovary.



For a more detailed description of hormonal changes during the menstrual cycle, visit www.zrtlab.com/fertility.

The ZRT Advantage

At ZRT, we understand that infertility affects many women today, and we developed the fertility profile to help your health care provider find the underlying causes. Our accurate testing ensures you receive results that will bring you one step closer to solving the issue of your infertility.

Convenience: Collection is done in the privacy of your own home, at the optimal time. This eliminates inconvenient and time consuming trips to a clinic for blood draws.

Turn-Around-Time: 95% of test results are completed and available within five business days.

Reporting: ZRT's comprehensive test report includes your hormone levels and takes into account your reported symptoms, medications, and hormone usage.

Results are reviewed by ZRT's licensed physicians and descriptive comments are included with the test report.