

Is poor thyroid function impacting your fertility?

By: Christine Sullivan

If you have been unsuccessfully trying to get pregnant for more than 6 months, before you embark on invasive medical procedures and spend thousands of dollars for assisted reproductive technology, ensure that your thyroid is functioning at its optimum.

Many women don't realize that good thyroid function is necessary for fertility, the ability to conceive and to maintain a pregnancy. An under (or over) functioning thyroid can prevent you from achieving that much desired pregnancy. While there are many and varied reasons for infertility, suboptimal thyroid function may be that "missing link" especially for those with no specific reproductive problems.

A full thyroid evaluation is essential, and should be done as soon as possible for any woman who wants to get pregnant, especially if she –

- Has been trying unsuccessfully to get pregnant for more than 6 months
- Has had two or more miscarriages
- Has an irregular menstrual cycle
- Has any family history of thyroid problems.

What Does the Thyroid Gland Do?

The thyroid gland is located near the front of the throat, just below the voice box & just above the collar bones. Every cell in the body depends upon thyroid hormones for regulation of the body's metabolism, blood calcium levels, energy production, fat metabolism, oxygen utilization, balance of other hormones & weight maintenance.

Hormones involved with thyroid function include Thyroid Releasing Hormone (TRH) released from the hypothalamus in the brain, which stimulates the pituitary gland at the base of the brain to release Thyroid Stimulating Hormone (TSH) which in turn stimulates the thyroid gland to produce Thyroxine (T4) & Triiodothyronine (T3). Much of T4 is converted to T3 (the active form) in the liver. Thyroid hormones are synthesized from iodine and the amino acid Tyrosine (from protein), and the conversion to the active form is reliant on the trace mineral Selenium.

Healthy Thyroid function can be affected by –

- Exposure to environmental toxins – electromagnetic radiation, chemicals, pesticides, heavy metals e.g. mercury & fluoride
- Genetic susceptibility
- High levels of stress
- Nutrient deficiencies
- Autoimmune disorders
- Infections
- Other hormone imbalances e.g. oestrogen dominance, high prolactin levels

How Does Hypothyroidism (Low) affect fertility?

Anovulatory cycles – not releasing an egg / ovulating. This makes pregnancy impossible.

Luteal Phase Problems – With a short second half of the menstrual cycle a fertilized egg can't implant securely and ends up leaving the body at the same time that menstruation would occur (very early miscarriage) & is often mistaken as a regular period.

High Prolactin Levels – due to elevated levels of Thyroid Releasing Hormone (TRH) and low levels of Thyroxine (T4) resulting in irregular ovulation or no ovulation.

Other Hormonal Imbalances – reduced sex hormone binding globulin (SHBG), oestrogen dominance, progesterone deficiency, all of which interfere with proper reproductive hormone balance.

Your check list for thyroid assessment:

1. Do you have any of the common signs & symptoms associated with low thyroid function?

- Inability to conceive / infertility
- Miscarriage
- Menstrual irregularities
- Period pain
- Low libido
- Lethargy & fatigue
- Susceptibility to the cold / cold hands & feet
- Inability to lose weight
- Changes in texture of skin, nails, hair, hair loss
- Recurrent infections
- Constipation

2. Is your basal temperature consistently below 36.5° C? Take your oral temperature at rest first thing in the morning before moving out of bed for 7 -10 days in the first 14 days of your cycle. Your temperature should be between 36° and 37° C but ideally above 36.5°C.

3. Blood Tests - For full thyroid assessment you require readings for TSH, T4, T3, rT3 & Thyroid Antibodies. TRH may also be required. For optimum fertility, your TSH level should be between 1 and 2. Your doctor or naturopath can order these tests for you.

4. Urinary Iodine - Iodine is a key component of thyroid hormone. Excessive iodine as well as a deficiency of iodine can result in low thyroid function. Your doctor or naturopath can order this test for you.

5. Diet & Lifestyle - Our modern western diet is a major contributor to increasing thyroid health problems. Foods detrimental to thyroid health include refined grains, simple sugars, soy products, peanuts & peanut products, caffeine, hydrogenated oils, cigarette smoking and alcohol. Excessive consumption of vegetables such as cabbage, broccoli, turnips, Brussels sprouts have the ability to block the absorption of iodine.

Exposure to heavy metals e.g. mercury (amalgam fillings) and fluoride (water supply, toothpaste) may also be detrimental.

Stress management is imperative. Stress results in elevated levels of cortisol, the main hormone released by the adrenal glands. Increased cortisol will inhibit the conversion of T4 to the active T3 hormone.

Exercise is beneficial as it will stimulate thyroid hormone secretion and increases tissue sensitivity to thyroid hormones.

Treating thyroid function is not a magic cure for all fertility issues but I have found that for many women, once thyroid health has been improved, their fertility issues were resolved and they have gone on to have a healthy pregnancy and enjoyed the treasures of motherhood.

If you suspect that less than ideal thyroid health may be contributing to your fertility difficulties or just impinging on your health generally, take action now!

Want to know more?

Visit www.christinesullivan.com.au or <http://www.healthycomparisons.com.au/pregnancy.aspx>

About the Author

Christine Sullivan is a leading Australian Naturopath in the field of natural fertility, women's health, hormonal health, preconception care, pregnancy, family, infant and child health.