

Thyroid Functions

There are several different types of thyroid function tests which may be carried out. Interpreting all the different tests is complicated as there are various conditions which can change the level of these hormones. A rough guide to the different types of tests and their interpretation is given below. However, your doctor or specialist .doctor should explain individual test results

Usually the first test to check thyroid function measures the levels of TSH in your blood. In people with hypothyroidism (underactive thyroid) the amount of TSH will usually be high. This is usually because the thyroid is not making enough T3 to stop the pituitary producing TSH. If the level of TSH is high, you will usually have further .tests to check the levels of T3 and T4 in the blood

In people with hyperthyroidism (overactive thyroid) the level of TSH will usually be low. This is usually because the thyroid gland is making too much of its hormones. When levels of T3 and T4 are high, the pituitary is 'turned off' and the amount of TSH produced is less. If you are found to have low levels of TSH you may have some more blood tests to check the levels of T3 and T4 in the blood. These tests may help .doctors to find a specific cause of the low TSH

Thyroid function tests are usually done to find out whether the thyroid gland is working properly. This is mainly to diagnose hypothyroidism (underactive thyroid) :and hyperthyroidism (overactive thyroid). Thyroid function tests can also be done to Monitor treatment with thyroid replacement medicine for people who have - .hypothyroidism
.Check thyroid gland function in people who are being treated for hyperthyroidism-
.Screen newborn babies for inherited problems with the thyroid-

Fertility Hormones Testing

For reproduction and development hormone testing

Measurement of all fertility hormones is usually performed between day 3 and 5 of a women's hormonal cycle for the diagnosis of menorrhea problems, onset of menopause and infertility. Having to perform each test separately has cost and time .implications

The Randox fertility panel includes follicle-stimulating hormone (FSH), luteinising hormone (LH), estradiol, progesterone, testosterone and prolactin. FSH and LH, produced in the hypothalamus, stimulate the ovaries and the uterus to prepare the female body for ovulation and implantation. Estradiol and progesterone are also .involved in this process, but are produced mainly in the ovaries

All hormones are interdependent on a classic negative feedback mechanism.

Testosterone is the main male hormone, but also produced by women in small quantities. Prolactin is produced in the pituitary gland and stimulates the growth of the mammary glands and the production of milk after childbirth. Testing of all co-dependent hormones can give valuable information of a woman's hormonal status. Diagnostically significant values can indicate the cause of the underlying problem, .and will instigate further relevant investigation

All analytes on the fertility array can be measured simultaneously with a small patient sample using Biochip Array Technology. The Evidence analyser offers high throughput testing of the fertility array, the Evidence Investigator is suitable for .lower throughput

Benefits

Suitable for human serum samples

Multiple test results per sample

Small sample volume - just 75µl serum for all six analytes

Fully automated and semi-automated analysers

Wide measuring range

Fast throughput

Excellent analytical performance

Fertility Array

(Follicle stimulating hormone (FSH

(Prolactin (PRL

(Luteinising hormone (LH

(Progesterone (PROG

(Testosterone (TEST

(Estradiol (EST