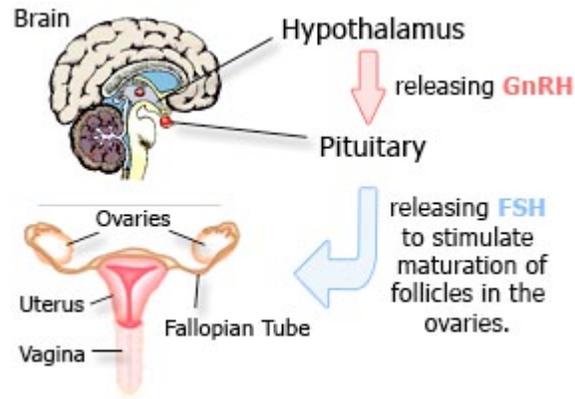


## FOLLICLE STIMULATING HORMONE



FSH is produced by the anterior pituitary gland and its function is to stimulate the ovaries. During the first two weeks of your cycle (follicular phase), FSH secreted by the pituitary gland stimulates the production of the ovarian follicle and oestradiol (oestrogen). This continues until the oestradiol levels peak, causing the pituitary gland to increase its production of LH (Luteinising Hormone), which acts as the trigger for ovulation to occur. If the ovary responds poorly to the FSH, and the level of oestradiol does not rise sufficiently, the pituitary gland recognizes this and secretes more FSH to further stimulate the ovary. In this feedback system the FSH level rises as the ovary becomes less responsive.

A woman's journey towards the menopause is usually seen with rising FSH levels and accompanying decline in ovarian function and egg quality.

FSH levels have therefore traditionally been considered a measure of how close a woman is to menopause, as well as reflecting the quality of eggs she is producing.

***The view however has recently been under more scrutiny.***

FSH levels are monitored in IVF clinics and here we find some difference in opinions.

- 1) Some IVF clinics maintain that elevated FSH levels are a clear indicator that a woman is nearing the menopause.
- 2) However, other clinics have the perspective that FSH levels are a measure of the **current** functioning of the ovaries, and that these levels fluctuate.
- 3) Yet other clinics assert that FSH levels are frequently more misleading than they are helpful, and that the only real test of how a woman's ovaries will respond to treatment is to put them through the full IVF stimulation process.

Currently there are no conventional treatments for raised FSH levels. However, traditional Chinese medicine (acupuncture and herbs) has been making some headway in this area.

If raised FSH is due to ageing trying to reduce the FSH levels is almost impossible and even if it was possible then it would be little or no benefit to the patient because the egg quality would remain poor.

***However, reduced ovarian function is not, always due to ageing. The output of the pituitary gland is also not always reflective of the true functioning of the ovary. It is in these situations that traditional Chinese medicine can potentially be useful and effective.***

Traditional Chinese Medicine (TCM) can improve ovarian function and regulate the pituitary output, which may in turn increase a patient's fertility.

### **THINGS YOU CAN DO TOO**

There are also a number of things that you can do to help too, choose from the list below the ideas that resonate with you:-

- 1) Cut down on your salt intake
- 2) Avoid coffee, tea and sugary/carbonated drinks. Try hot water and lemon juice instead
- 3) Take gentle exercise – hatha yoga or walks are good
- 4) Keep your lower abdomen warm
- 5) Spend time relaxing and doing deep breathing. Meditation can be good, try to focus on the colour blue
- 6) Have regular acupuncture and take Chinese herbs (prescribed by a qualified practitioner)
- 7) Take an essential fatty acid such as DHA each day
- 8) Eat beans, legumes, onions and garlic to help the liver to break down oestrogen
- 9) Eat cabbage to increase the rate at which the liver changes oestrogen to its water soluble form so that it can be excreted
- 10) Eat phyto-oestrogens such as soya beans, soya sprouts, linseed and liquorice.

### **Additional testing – AMH**

Because of these differing opinions on the value of the FSH testing, another hormone test called anti-Mullerian hormone or AMH (ovarian reserve) is becoming increasingly popular at fertility clinics, although it is not part of the routine testing.

AMH is secreted by small antral follicles in the ovaries. Antral follicles are resting follicles that are found on the ovary at the beginning of each menstrual cycle. They can be an indication of the ovarian reserve of a woman. A high antral follicle count indicates that a woman has a large number of eggs remaining in her ovary.