



HORMONE TESTING

# Luteinizing Hormone Information Sheet

## What is the luteinizing hormone?

Luteinizing hormone (LH) is a hormone produced in the pituitary gland in both males and females. In females, an “LH surge” (acute rise for 24 - 48 hours) triggers ovulation and the conversion of the residual follicle into a corpus luteum. In males, LH stimulates the production of testosterone (1).

## What are normal LH levels?

LH levels fluctuate during each menstrual cycle in women of reproductive age (2). Basal levels in reproductive age women are typically less than 20 IU/L, with much higher levels observed during the “LH surge”. LH levels typically remain high in menopause.

Males generally have LH levels between 0.5 and 12.1 IU/L (3). Normally children have low LH levels until they reach puberty. Children with precocious (early) puberty may have LH levels in the reproductive range (2).

## What do high LH levels mean?

Relatively high LH levels are frequently detected in the females with polycystic ovary syndrome, but usually still remain within the normal reproductive range (4). Persistently high LH levels in females may be a sign of premature menopause, or Turner syndrome (2).

Persistently high LH levels in males can occur in Klinefelter syndrome, castration, or testicular failure (5). High LH levels in both genders may be indicative of gonadal dysgenesis or congenital adrenal hyperplasia (2).

Elevated LH levels have been associated with a reduced fertilization rate in a variety of studies (6), as well as increased risk of miscarriage (7).

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## What do low LH levels mean?

Diminished LH levels can lead to hypogonadism (gonadal function failure), which can cause low sperm production in males and amenorrhea (absence of menstruation) in females. Various conditions can contribute to abnormally low LH, including Pasqualini syndrome, Kallmann syndrome, hypothalamic suppression, hypopituitarism, eating disorders, and hyperprolactinemia (2).

## Where can I find more info?

Visit [www.genetrackdiagnostics.com](http://www.genetrackdiagnostics.com) for full test information, including specimen collection requirements

### CONTACT US:

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### NOTE:

This brochure is provided for general information purposes only. It is not intended to replace medical advice from a health professional.

### References:

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