

## Menopause Lab Findings

There are numerous hormonal changes which occur in menopause. First, the natural, age-related decrease in estrogen decreases negative feedback on other hormones. Thus, LH, FSH and GnRH increase.



PLAY PICMONIC

### Decreased Estrogen

[Down-arrow Easter-egg](#)

Menopause occurs due to cessation of estrogen (and progesterone) production from the ovaries. Decreased estrogen levels influence other levels of hormones as well.

### Lack of Negative Feedback

[Slashing Negative Feedback](#)

As estrogen levels decline, negative feedback on FSH and LH secretion is removed. This lack of negative feedback allows FSH and LH levels to increase.

### Increased FSH

[Up-arrow Fish](#)

With a lack of negative feedback from estrogen, FSH levels become elevated.

### Increased LH

[Up-arrow Luge](#)

With a lack of negative feedback from estrogen, LH levels become elevated.

### Increased GnRH

[Up-arrow Gonad-gopher](#)

GnRH production and secretion is increased in menopause, further inducing secretion of FSH and LH.

### Small Amount of Estrogen From Androgen Conversion

[Small Easter-egg from &-droid-genie](#)

After menopause, estrogen continues to be produced through androgen conversion in other tissues, notably adipose tissue and ovaries, but also in bone, blood vessels and even in the brain.

### Increased Androgens = Hirsutism

[Up-arrow &-droid-genie causing Bearded-woman](#)

Androgen levels do not change in menopause, but the decrease in estrogen leads to decreased steroid-hormone-binding globulin. Due to increased free testosterone (some of which is converted to estrogen), hirsutism can occur in postmenopausal women.