

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 in 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.