

# **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.<br/>
<a href="https://www.est.numerous.com/results/">br/></a>



**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 & Dearded-woman 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.