

FEMM-Speak

Point of change (POC): The change from 'dryness' to E (estrogen) mucus.

LH surge: Reflects peak LH levels, triggered by peak estrogen.

Indicates ovulation within 24-36 hours.

Peak day: Last day of ES mucus.

Luteal phase: Day after Peak day until the end of the cycle.

Fertile window: POC through P+3, LH+4.

- **P+3** covers the time of ovulation and 24-hour lifespan of the egg.
- **LH+4** covers the time that LH surges and maintains a plateau (rather than a peak).

Pregnancy:

At ovulation, an egg is swept into the fallopian tube where fertilization takes place. After fertilization, cell division begins, with the egg taking 4-5 days to travel the length of the fallopian tube to the uterus.

A fertilized egg implants in the uterine lining 6-7 days after ovulation.

- A pregnancy test checks for presence of the hormone HCG.
 HCG can be detected in the blood 3-4 days after implantation and in the urine 4-5 days after implantation.

***Healthy cycles** for women in reproductive years:

- **Cycle length:** 24-36 days.
- **Luteal length:** 9-18 days (after Peak day).
- **Menstruation length:** 3-7 days, with at least 1 day of H or M bleeding.

*Seek **Medical Management** if you experience 3 irregular cycles in a year, or 2 consecutive irregular cycles.

FEMM is a knowledge and prevention-based reproductive health program which teaches women to understand and monitor their hormonal and other vital signs of health at all stages of reproductive life.

The body functions as an integrated whole, and therefore reproductive health affects overall health.

A woman's reproductive cycle is managed by hormonal communication between the brain and reproductive organs. The hormones **FSH** (follicle-stimulating hormone) and **LH** (luteinizing hormone) originate in the brain and signal the ovary to mature and release an egg each cycle. In a coordinated manner, the ovary produces the hormone **estrogen** (before ovulation) and the hormone **progesterone** (after ovulation).

These hormones influence all the activity of the reproductive system as well as general health.

Estrogen and progesterone are required at sufficient levels to balance each other's work in the body.

Estrogen proliferates & tones; progesterone normalizes & relaxes

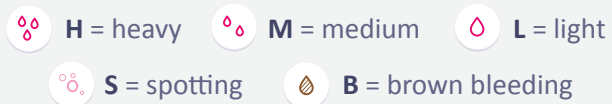
	Estrogen	Progesterone
Uterus	Tones, contracts	Relaxes
Endometrium	Proliferates	Maintains
Breast tissue	Proliferates	Normalizes
Bone	Bone formation	Bone maintenance
Blood vessels	Dilates, increases flow	Relaxes, normalizes blood clotting
Blood sugar	Elevates	Normalizes
Sodium	Fluid retention	Natural diuretic
Brain cells	Stimulates	Maintains and heals
Well-being	Normal levels promote well-being; high levels increase anxiety	Promotes sleep and relaxation; decreases anxiety

Reproductive biomarkers: a woman's vital signs

Biomarker	Health Significance
Bleeding	Hormones are responsible for building the uterine lining throughout the cycle. <ul style="list-style-type: none"> menstruation qualities reflect hormonal levels of the previous cycle.
Cervical Mucus	Changes in cervical mucus reflect changing hormones. <ul style="list-style-type: none"> mucus qualities indicate sufficiency of hormonal levels and key cycle events: i.e. ovulation, healthy luteal phase.
Other Signs	Unusual bleeding or mucus, cramps, headache, etc. <ul style="list-style-type: none"> may reflect hormonal or other health issues.

Charting

Red represents blood: menstruation and any bleeding in the cycle. The quality of bleeding should be noted using the following symbols:



- Heavy:** using approximately 5 or more pads or tampons per day (>25ml), needing to change pad at night.
- Medium:** using approximately 3-4 regular pads or tampons per day (15-25ml), consistent flow.
- Light:** using approximately 1-2 regular pads or tampons per day (<15ml). Some regular flow.
Light bleeding often happens at the beginning or end of menstruation.
- Spotting:** using only a panty liner (<5ml), irregular flow.
Spotting indicates a small amount of bleeding outside of menstruation. It can be fresh red blood, or older brown blood.
- Brown bleeding:** bleeding that is brown or black, not bright red.

Estrogen cervical mucus observations require the use of 2 colors and symbols:

- Light Blue** and the symbol **EL** are used for the change to moist mucus, reflecting rising estrogen.

- Dark Blue** and the symbol **ES** are used for stretchy, and/or clear and/or slippery/lubricative, fluid mucus, reflecting high estrogen levels. The additional **ES** symbols should be charted to clarify the quality of the observation:

S = stretchy, **C** = clear, **L** = slippery, lubricative

Gray and the symbol **G** are used for dryness, reflecting progesterone.

Some women notice sticky or pasty, unchanging mucus, which is neither dry, nor a clear sign of estrogenic activity. Chart this confusing observation with the color **Yellow**.

If **EL** or **ES** or bleeding occurs along with **Y**, chart also those colors and symbols.

Y observations may be due to:

- Normal cellular sloughing/secretions from vagina, cervix, endometrium.
- Cellular proliferation from constant low-level estrogen (i.e. delayed ovulation).
- Inflammation/infection. Illness and medication can cause mucus changes.

Consider **Y** fertile until cycle patterns establish.

Important to promptly test and treat any inflammation/infection.

Cervical mucus qualities reflect hormonal activity

Hormone	Estrogen rising	Estrogen high	Progesterone
Charting Color			
Fertility	Beginning	Peak	None/except P+3, LH+4
Observation		Clear	Cloudy
Sensation		Stretchy/Thin	Thick
		Abundant	Scant
			or
	Moist	Slippery/Fluid	Dry