

Use red for H, blue for O, and light colors for U, E, and D. (1) Begin with left half of the large illustration. Only parts of the ovaries and uterine veins are shown. Nerves and lymph vessels that may accompany arteries and veins are not shown. (2) Color for the two views of the anteverted uterus above color the major ligaments.



The **uterus** and **uterine tubes** are covered by the fold (an upside down "U"-shaped) of the **broad ligament**. The uterine tubes, suspended in a part of the broad ligament (*mesosalpinx*), are lateral extensions of the uterus. The tubes are lined with nutrient-loaded ciliated columnar epithelium supported by connective tissue and smooth muscle. The rhythmic contractions of this muscle aid the ovum in its trek from the fimbriae to the **uterine cavity** (assuming it avoids the abyss!), and the lining cells support it nutritionally. The tube is about four inches long and has three rather distinct parts: The distal **fimbriae** (finger-like projections), which catch the discharged ovum and whisk it into the tubular lumen; the **ampulla**, or widest part of the tube; and the **isthmus**, the lumen of which narrows as it enters the uterine cavity.



The uterus is a pear-shaped structure about three inches long; it gets bigger in pregnancy. The upper part (above the tubal orifices) is the **fundus**; the central part is the **body** or *corpus*, and the lower one inch is the **cervix**.

The uterus is antverted (tilted forward) and anteflexed (bent forward) relative to the vagina. Its neck (cervix) fits into the upper part of the vagina at about a right angle (anteflexed) and the uterine body (fundus) is bent (anteflexed) and tilted (anteverted) anteriorly over the bladder. Backward bending/tilting (retroflexion/retroversion) of the uterus is not uncommon, particularly in women who have given birth. The retroflexed uterus is predisposed to mild slipping into the vagina (*prolapse*), as the uterus is more in the axis of the cervix/vagina. Such a happening is generally resisted by the pelvic and urogenital diaphragms, the perineal body, and numerous fibrous ligaments (broad ligament and condensations of the pelvic fasciae, not shown) that moor the uterus and its tubes to the pelvic wall and sacrum. The wall of the uterus is largely smooth muscle (**myometrium**) lined with a glandular surface layer of variable thickness (**endometrium**) that is extremely sensitive to the hormones estrogen and progesterone.



The **cervix** of the uterus, one inch or so in length, has two parts: the superior supravaginal and the lower vaginal part. The mucosal lining of the cervix is characterized by intersecting ridges that resist bacterial onslaughts post-menses. The cervical mucosa does not participate in the periodic thickenings and thinnings experienced by the uterine body's mucosa.

RETROFLEXION (TIPPED)

The **vagina** is an elastic, fibromuscular tube with a mucosal lining of stratified squamous epithelium. The anterior and posterior mucosal surfaces are normally in contact. The anterior vaginal wall incorporates the short (4 cm) urethra. The mucosa of the vagina lacks glands; secretory activity during sexual stimulation is derived from a transudate of plasma from local capillaries and glands in the cervix, and secretion from the male bulbourethral glands. The vaginal lining reveals few sensory receptors. Where the cervix fits into the vagina, a circular moat or trough is formed around it (*fornix, fornices*). The fibroelastic posterior **fornix** is capable of significant expansion during intercourse.



ANTEVERSION (NORMAL)