

IV ROLE OF THE FEMALE IN REPRODUCTION

A. Females role

1. to produce the egg
2. to carry the offspring until birth
3. to provide for offspring

B. Signs of Puberty

1. In livestock, easy to detect female reaching puberty.
 - a. signs of heat or estrus
 - 1) animals attempt to ride others
 - 2) female preparing for ovulation
 - b. ovulation = release of egg into reproductive tract

C. Estrus Cycles

1. Female animals don't ovulate continuously
 - a. Go through cycle where they produce eggs and a time where they don't
 - b. Estrus cycles - starts at puberty and keeps recycling throughout animals life
2. Length of cycle
 - a. varies among livestock
 - 1) cow heat period = 8-30 hours(14 hours avg)
 - 2) sow heat period = 1-5 days(2-3 days avg.)
 - 3) ewe heat period = 1-3 days(30 hours avg.)

D. Causes of Heat

1. Ovaries = produce eggs
2. At time of heat, blood has high content of estrogen(female hormone)
 - a. as level decreases, heat signs decreases
 - b. as level of estrogen increases, large growth surrounding the egg is forming on ovary
 - c. The follicle is producing the estrogen that causes the sign of heat

E. Why follicle starts growth?

1. Buildup of hormone from pituitary gland(pea-sized gland at base of brain)
2. as hormone builds in system, follicle grows
3. called follicle stimulating hormone (FSH) Why?
4. as follicle grows, more estrogen is produced, more signs of heat(estrus)

* PUT DRAWING OF COW AND HORMONE PROCESS ON BOARD

F. End of Heat

1. Female Nervous System no longer responds to estrogen hormone

G. Ovulation

1. Pituitary glands quit producing FSH and produces another hormone - LUTINIZING HORMONE
2. Luetinizing hormone
 - a. travels to ovary and causes the follicle to rupture
 - b. as follicle is ruptured, the egg is ovulated