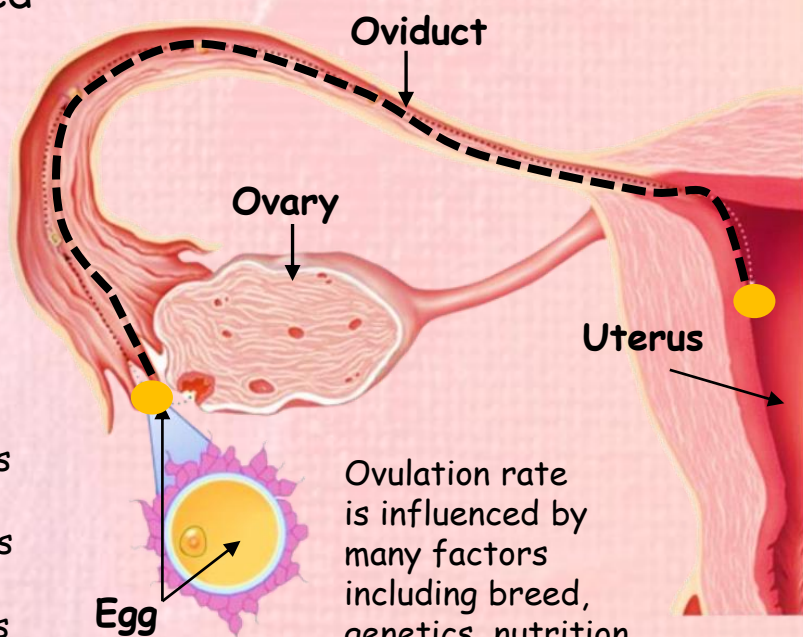


OVULATION = EGG RELEASE

One of the most important factors affecting the profitability of sheep and goat production is prolificacy or litter size. Litter size (number of offspring) is determined primarily by ovulation rate, since monozygotic (identical) twins aren't very common in sheep/goats. Ovulation is the release of the egg (or eggs) from the ovary. It usually occurs at the end of estrus.

The eggs (oocytes) travel through the oviducts and are fertilized if sperm are present. After fertilization, the fertilized egg (zygote) begins to divide and develop into an embryo. The embryo travels to the uterus where it implants and begins to grow into a fetus. If the eggs are not fertilized the female will continue her cycle and eventually return to estrus.

Most ewes and does ovulate 1 to 3 eggs per cycle. Some breeds are more likely to release only one egg whereas prolific breeds may ovulate 3 to 5 eggs per cycle. Ovulation rate increases naturally with age, with mature ewes/does usually ovulating more eggs than younger females. Ovulation rates are usually highest during the peak of the natural breeding season, i.e., in the fall when daylight hours are decreasing.



Ovulation rate is influenced by many factors including breed, genetics, nutrition, body condition, age, and season.



Flushing is a common strategy to improve ovulation rates. Flushing is when you provide extra feed to females prior to and during the early part of the breeding season. Ewes/does in better body condition usually ovulate more eggs. Superovulation involves using hormones like FSH to induce the ovaries to release more eggs. It is done primarily with embryo transfer (ET) and other assisted reproductive technologies.