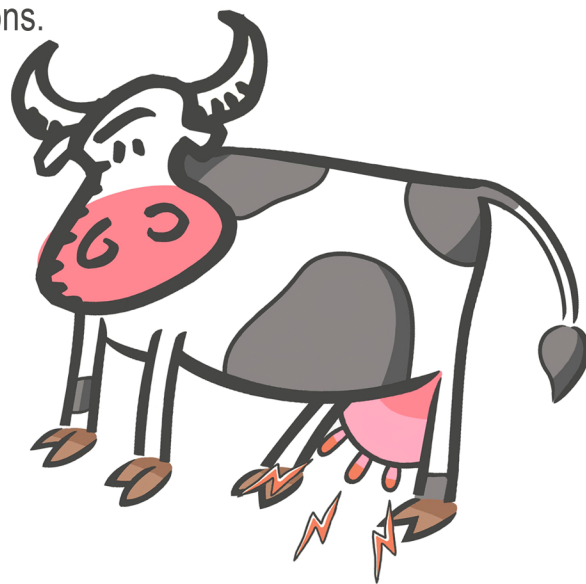
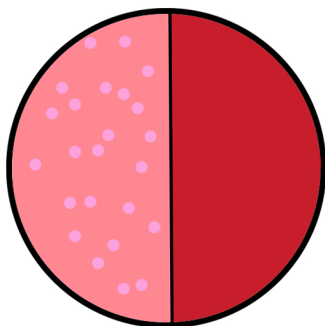


HOW TO IDENTIFY GRAM NEGATIVE SPECIES

Gram negative organisms cannot be differentiated at the genus level (such as *E. coli*, *Klebsiella* or *Enterobacter*) on the agar plates used in on-farm cultures. However, they can be identified as lactose negative or lactose positive by what color they ferment lactose in MacConkey agar. Gram negative infections often resolve on their own. Therefore, it is not always necessary to treat with antibiotics. Remember, it is always advisable to consult your local veterinarian when making these decisions.

Biplate

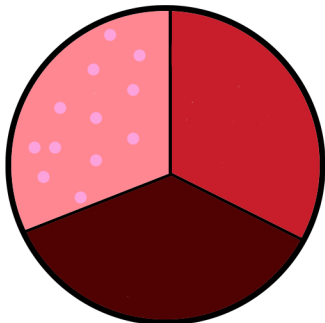
Gram-Negative bacteria (growth only on MacConkey and blood agars)



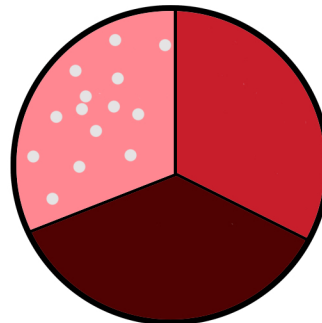
Triplate

Lactose-positive (pink growth on MacConkey agar) *Lactose-negative* (white/yellow growth on MacConkey agar)

E. coli
Klebsiella

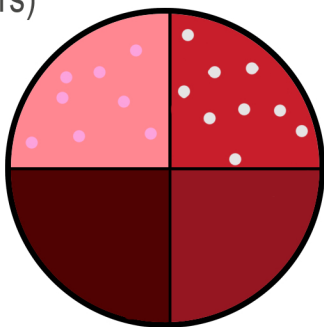


Enterobacter



Quadplate

Gram-Negative bacteria (growth only on MacConkey and blood agars)



Contamination

Contaminated plate (growth on all agars)

