

ANTIMICROBIAL RESISTANT *ESCHERICHIA COLI* TRANSMISSION THROUGH RAW COW'S MILK CONSUMPTION

Objectives:

1. *E. coli* influence through raw milk
2. Contamination pathways of *E. coli*
3. Antimicrobial resistance of *E. coli*
4. Resistance mechanisms of *E. coli*
5. *E. coli*'s control and preventive measures

Antibiotic	% resistance	% usage (mastitis)
Tetracycline	43,8	-
Sulfamethoxazole	34,4	-
Ampicillin	29	41 (penicillins)
Cephalosporin	3	23
Azithromycin	2	10 (macrolides)

Conclusions:

- Raw milk consumption increases the probability of suffering *E. coli* raw milk borne diseases.
- Raw milk boiling eliminates efficiently *E. coli*.
- It is uncertain if cheese ripening inhibits *E. coli*.

D. 163/2018 requirements:

- ✓ Sale < 24 h
- ✓ Absence in 25 ml
- ✓ Expiry date < 72 h
- ✓ Refrigeration temperature
- ✓ Boiling before consumption



Microbiote competency

↓ a_w
↓ pH



ESCHERICHIA COLI TRANSFER TO RAW MILK

