

Isolation, Identification, and Enumeration of *Campylobacter jejuni/coli/lari* from Poultry Rinse and Sponge Samples: Quantitative Analysis

Day 1

Chicken Rinse (from a chicken rinsed in 400 mL BPW¹) or Sponge Sample (contains 25 mL BPW)

Thoroughly mix sample.
Deposit **250 µL** of sample onto 4 Campy-Cefex[®] plates.
Deposit **100 µL** of sample onto 2 Campy-Cefex[®] plates.
Disperse aliquots using spread plate technique.

Add 4 -5 drops of humectant to a piece of filter paper.
Place the filter paper in an uncovered Petri dish.
Place Petri dishes into a sealed container.
Apply the desired microaerophilic condition and seal the container
Incubate for 48 ± 2hrs @ 42 ± 1°C.

* This chart represents the best case scenario. But, analysis may take longer due to normal analytical circumstance such as re-streaking isolates for purity.

**DIRECT PLATING &
SELECTIVE
ISOLATION MEDIA**

Day 3

(+)

**No Growth or
No Typical Colonies
(-)**
Report to M2K⁵ and LEARN⁶

Count all typical colonies types

Calculate total number of presumptive positive colonies

READING RESULTS

Pick 5 well isolated colonies representing each colony type typical for *Campylobacter*

Conduct **microscopic examination** for corkscrew morphology and darting motility
Perform **latex agglutination test**

(-)

CONFIRMED NEGATIVE
Report to M2K and LEARN

(+)

CONFIRMED POSITIVE
Report to M2K and LEARN

**CONFIRMED
POSITIVE ISOLATES**

FSIS FSLs³ prepare isolates and ship to USDA/ARS⁴.

**CONFIRMATORY
ANALYSIS**

¹ BPW = Buffered Peptone Water
² SBA = Tryptic soy agar with 5% sheep blood agar (SBA) or equivalent
³ FSIS FSLs = Food Safety Inspection Service Field Service Laboratories
⁴ USDA/ARS = Agricultural Research Service located in Athens, GA
⁵ M2K = FSIS Database storage for sampling and laboratory analyses data
⁶ LEARN = FSIS Laboratory Electronic Application for Results Notification