

# METHOD SUMMARY – QWI-FM0032



<b>Method Title</b>	Campylobacter jejuni/coli Presence/absence - AS		
<b>Document number</b>	<b>QWI-FM0032</b>	<b>Date Issued</b>	2 <sup>nd</sup> March 2020

Method External References	AS 5013.6- 2015 - Food Microbiology – Examination for specific organisms - <i>Campylobacter</i>		
Matrix	As listed on NATA scope		
ALS Department	<input type="checkbox"/> Pharmaceutical Chemistry <input type="checkbox"/> Water Microbiology <input checked="" type="checkbox"/> Food Microbiology <input type="checkbox"/> Pharmaceutical Microbiology <input type="checkbox"/> Food Chemistry		
Accreditation Status	<input checked="" type="checkbox"/> NATA <input type="checkbox"/> NON-NATA <input type="checkbox"/> N/A		
Analysis technique	<input type="checkbox"/> HPLC <input type="checkbox"/> GC <input type="checkbox"/> Wet Chemistry <input type="checkbox"/> Physical <input type="checkbox"/> Gravimetric <input checked="" type="checkbox"/> Qualitative <input type="checkbox"/> Pour Plate <input type="checkbox"/> Spread Plate <input type="checkbox"/> MPN <input type="checkbox"/> Filtration <input type="checkbox"/> Petrifilm <input type="checkbox"/> EHS <input type="checkbox"/> ELISA <input type="checkbox"/> VIDAS UP <input type="checkbox"/> VIDAS <input type="checkbox"/> Other (please specify): _____		
Method Scope	<p>This method documents a qualitative and confirmation test for the detection of <i>Campylobacter jejuni/coli</i> by pre-enrichment (without antibiotic supplement) followed by selective enrichment in meat, poultry and food products.</p> <p>Food samples must be processed rapidly in order to ensure optimum isolation due to its sensitivity to many environmental conditions.</p>		
Method Principle	<p>This test is designed to determine whether a sample complies with an established specification for microbiological quality.</p> <p>24.8 to 25 g of sample is mixed thoroughly with 100 mL of enrichment broth (Preston broth) supplemented with Campylobacter growth supplement and lysed defibrinated horse blood but without antibiotic supplement. The preparation is incubated at 37 ± 1 °C for 2 hours. Then 0.4 mL of a mixture of antibiotic is added to the broth culture and incubated at 42 ± 1 °C for 44 ± 4 hours under microaerophilic conditions.</p> <p>Enrichment broth cultures are then inoculated onto plates of Preston agar and Skirrow agar for isolation. Plates are then incubated at 42 ± 1 °C for 44 ± 4 hours and the number of presumptive Campylobacter colonies are confirmed by means of biochemical reactions such as Oxidase test, Gram stain, antibiotic sensitivity, Hippurate hydrolysis and growth on Blood agar plates at 25 ± 1 °C aerobically and 37 ± 1 °C microaerophilically, or alternative verified confirmation methods (e.g. MALDI-TOF Biotyper)</p>		
Reporting Unit	Determination of Campylobacter jejuni/coli in 25 g		
LOR/LOQ	Presence/Absence		

Minimum amount of sample required for analysis	50 g	Turnaround time	4 days
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<b>Author:</b>	Document Controller	<b>Date:</b>	3 <sup>rd</sup> March 2020
<b>Authorised By:</b>	National Quality Manager	<b>Date:</b>	3 <sup>rd</sup> March 2020