

METHOD SUMMARY – QWI-FM0019



Method Title	Enterobacteriaceae Meat & Poultry – Presence/Absence – AS		
Document number	QWI-FM0019	Date Issued	20 th February 2019

Method External References	AS 5013.8-2004 Food Microbiology – Meat and meat products – Detection and enumeration of Enterobacteriaceae without resuscitation – MPN Technique and colony count
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 describes a procedure for the detection of <i>Enterobacteriaceae</i> in food without resuscitation. The temperature used is to be the subject of agreement between the parties concerned.</p> <p>In case of frozen foods, an incubation temperature of 30 °C is preferred when the aim of enumeration is technological.</p> <p>The family <i>Enterobacteriaceae</i> comprises a large biochemically and genetically related group of bacteria that is heterogenous in ecology and pathogenicity. For the purpose of this method, they all ferment glucose and are oxidase negative.</p>
Method Principle	<p>A food sample is prepared by weighing up 10 g or 10 mL of test sample. Three (3) tubes of EE Broth (Buffered Brilliant Green Bile Glucose Broth) are inoculated with 1 mL of test sample if the product is liquid or 1 mL of the initial suspension in the case of other products. Tubes are incubated at 37 °C for 24 hours. Each tube is then subcultured onto VRBGA (Violet Red Bile Glucose Agar) and incubated at 37 °C for 24 hours. Typical colonies are confirmed using biochemical tests and the presence or absence of <i>Enterobacteriaceae</i> is determined per mL or per g of the test sample from the results of confirmed typical colonies per dish.</p>
Reporting Unit	Detected/Not detected per g or per mL as per client specifications
LOR/LOQ	N/D

Minimum amount of sample required for analysis	Minimum of 10 g	Turnaround time	3 days
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Author:	Document Controller	Date:	5 th March 2019
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