

## METHOD SUMMARY – QWI-FM0081

<b>Method Title</b>	Coliform Count in Poultry		
<b>Document number</b>	<b>QWI-FM0081</b>	<b>Date Issued</b>	<b>18<sup>th</sup> May 2016</b>

<b>Method External References</b>	3M: Petrifilm Interpretation guide		
	AOAC 991.14: Coliform and Escherichia coli counts in Foods		
	AOAC 998.08: Confirmed Escherichia coli counts in Poultry, Meats and Seafood		
	AS5013.11.1-2004: Food Microbiology - Microbiology of food and animal feeding stuffs – Preparation of test samples, initial suspension and decimal dilutions of microbiological examination – General rules for the preparation of the initial suspension and decimal dilution		
	AS 5013.14.1-2010: Food Microbiology - Microbiology of food and animal feeding stuffs - General rules for microbiological examinations		
	AS 5013.20-2004: Food Microbiology – Preparation of test samples for microbiological examination – Poultry and poultry products		
<b>Matrix</b>	Poultry or poultry products prepared or packed as individual units of any size (for example sausages, vacuum-packed minced poultry) or poultry in pieces not exceeding 2kg in mass. Carcasses, or cuts of carcasses, in pieces exceeding 2kg in mass, and mechanically separated poultry.		
<b>ALS Department</b>	<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		
<b>Accreditation Status</b>	<input checked="" type="checkbox"/> NATA <input type="checkbox"/> NON-NATA <input type="checkbox"/> N/A		
<b>Analysis technique</b>	<input type="checkbox"/> HPLC <input type="checkbox"/> GC <input type="checkbox"/> Wet Chemistry <input type="checkbox"/> Physical <input type="checkbox"/> Gravimetric <input type="checkbox"/> Qualitative <input type="checkbox"/> Pour Plate <input type="checkbox"/> Spread Plate <input type="checkbox"/> MPN <input type="checkbox"/> Filtration <input checked="" type="checkbox"/> Petrifilm <input type="checkbox"/> EHS <input type="checkbox"/> ELISA <input type="checkbox"/> VIDAS UP <input type="checkbox"/> VIDAS <input type="checkbox"/> TEMPO		
<b>Method Principle</b>	<p>Poultry and poultry products are prepared by means of the rinse technique or by subsampling the product to be analysed.</p> <p>This method uses bacterial culture plates of dry medium and cold H<sub>2</sub>O soluble gel. 1 mL of test suspension is added to the plate and when pressure is applied to the overlay the test portion is spread over 20 cm<sup>2</sup>. The gelling agent is allowed to solidify and plates are incubated at 35 °C and then counted. Petrifilm™ Coliform Count plates contain Violet Red Bile (VRB) nutrients, a cold water gelling agent, an indicator of glucuronidase activity and a tetrazolium indicator that facilitates colony enumeration. The top film traps gas produced by the lactose fermenting Coliforms. Typical coliform colony morphology is blue to blue-red colonies with gas regardless of size or intensity of colour or red colonies with gas.</p>		

	<p>Decimal dilutions of the poultry or poultry products can also be prepared and tested.</p> <p>A count of colonies on each plate is then performed, the result is then calculated taken into account the dilution factor and poultry portion/mass. The number of micro-organisms per g or cm<sup>2</sup> is then calculated</p>
Reporting Unit	Coliform Count cfu/g, cfu/bird or cfu/cm <sup>2</sup>
LOR/LOQ	< 10

Minimum amount of sample required for analysis	Poultry unit	Turnaround time	3 days
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<b>Author:</b>	Document Controller	<b>Date:</b>	19 <sup>th</sup> December 2017
<b>Authorised By:</b>	National Quality Manager	<b>Date:</b>	19 <sup>th</sup> December 2017

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