

METHOD SUMMARY – QWI-FM0026



Method Title	Lactobacillus spp. Enumeration – In House		
Document number	QWI-FM0026	Date Issued	15 th March 2019

Method External References	The Oxoid Manual 8th Edition, November 1998 Spoilage of Processed Foods: Causes and Diagnosis, AIFST Inc (NSW Branch) Food Microbiology Group. 2001 AS 5013.11.1-2004 AS 5013.14-2010		
Matrix	As listed on NATA Scope		
ALS Department	<input type="checkbox"/> Pharmaceutical Chemistry <input type="checkbox"/> Water Microbiology <input type="checkbox"/> Pharmaceutical Microbiology <input checked="" type="checkbox"/> Food 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 type="checkbox"/> Qualitative <input checked="" 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	This method is used for the determination of the number of Lactobacillus spp present in food products, and also environmental swabs. Food samples must be processed rapidly in order to ensure optimum isolation due to its sensitivity to many environmental conditions.		
Method Principle	The number of Lactobacillus species (spp) present in a given quantity of food products or environmental swabs is enumerated by Pour Plate method using MRS Agar with an adjusted pH of 4.8 ± 0.2. Colonies present on the agar are then confirmed by Gram Stain and Catalase test. Calculation of the number of mesophilic Lactobacillus spp per gram of test sample or environmental swabs from the number of colonies obtained on the selected Petri dishes, and possibly confirmed.		
Reporting Unit	Determination of Lactobacillus spp cfu/g or cfu/mL		
LOR/LOQ	< 10 cfu/g or cfu/mL		

Minimum amount of sample required for analysis	20 g	Turnaround time	72 hours
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