

AOAC RI Completes GovVal Review of *Listeria* in Ready-to-Eat Meats and on Stainless Steel Compared to MFHPB-30

The AOAC Research Institute (RI) announced September 30, 2011, that it has completed review of *Listeria* species and *L. monocytogenes* test kit methods through the GovVal validation program in comparison to the Health Canada (HC) reference method for *Listeria* species and *L. monocytogenes* detection, MFHPB-30. In all, 10 *Listeria* species and *L. monocytogenes* test kit methods from five method developers were submitted. Through the GovVal program, 10 commercially rapid methods for *Listeria* detection, demonstrating equivalent or better performance when compared with MFHPB-30, are now available (see sidebar for a list of

approved test kit methods).

The test kit methods were previously certified as AOAC RI *Performance Tested Methods*SM (PTM) through comparisons to other reference methods for *Listeria*, such as those from the U.S. Food and Drug Administration's *Bacteriological Analytical Manual* (BAM), U.S. Department of Agriculture-Food Safety and Inspection Service's *Microbiology Laboratory Guidebook* (MLG), AOAC *Official Method*SM 993.12, or ISO 11290.

However, few of these test kit methods had been compared to the HC reference method prior to this evaluation.

The GovVal program is based on the PTM program

operated by the AOAC RI. Candidate test kit methods were evaluated using a validation protocol approved by AOAC, the Canadian Food Inspection Agency (CFIA), and HC, using blind-coded, randomized samples. Sample preparation and independent testing of many test kit methods, as well as the MFHPB-30 reference method, were done by an AOAC RI-approved independent laboratory, Q Laboratories, Inc. in Cincinnati, Ohio, USA. Results were reviewed and approved by the AOAC General Referee on Microbiology.

The GovVal program also compared several international cultural methods to MFHPB-30, generating data in support of an equivalency

determination for internationally accepted reference methods—a key step in creating harmonized method validation protocols to streamline new international regulatory test kits.

HC and CFIA invite method developers of the approved test kits to submit the AOAC report, along with raw and summary data to HC's *Compendium of Analytical Methods* at micro.method.committee@hc-sc.gc.ca. Data will be reviewed by HC's Microbiology Methods Committee (MMC) for consideration as acceptable methods for regulatory testing in Canada.

Conclusion

The GovVal program is designed to evaluate previously approved AOAC test methods—but with a matrix extension and a reference method extension—for the specific needs of regulatory agencies to enforce their standards for regulatory testing, in this case *Listeria monocytogenes* in ready-to-eat meats and *Listeria* species on stainless steel surfaces as compared to the HC reference method. It is hoped that the GovVal program better meets the needs of regulatory agencies in responding to food contamination incidents.

For an up-to-date list of PTMs, visit <http://www.aoac.org/testkits/testedmethods.html>. For more information, contact **Zerlinde Johnson**, technical program manager, at zjohnson@aoac.org. ■

GOV-VAL APPROVED TEST METHODS FOR <i>LISTERIA</i> IN READY-TO-EAT MEATS AND ON STAINLESS STEEL SURFACES			
Method developer	Method name	PTM Certificate or OMA No.	Validated matrixes
3M	3M TM Tecra TM <i>Listeria</i> VIA	OMA 995.22 and 2000.09	RTE meats ^a and stainless steel
	3M TM Petrifilm TM Environmental <i>Listeria</i> Plates	PTM 030601	Stainless steel
bioMérieux	VIDAS [®] <i>Listeria monocytogenes</i> Xpress (LMX)	PTM 091103	RTE meats
	VIDAS [®] <i>Listeria</i> species Xpress (LSX)	PTM 100501	Stainless steel
	VIDAS [®] <i>Listeria monocytogenes</i> II (LM0II)	OMA 2004.02	RTE meats
Bio-Rad Laboratories, Inc.	iQ-Check TM <i>Listeria</i> species Real-Time PCR Test Kit	PTM 090701	RTE meats and stainless steel
	iQ-Check TM <i>Listeria monocytogenes</i> II Real-Time PCR Test Kit	PTM 010802	RTE meats and stainless steel
DuPont Qualicon	BAX [®] System Real-Time PCR Assay for Genus <i>Listeria</i> 24E	PTM 050903	RTE meats and stainless steel
Life Technologies	MicroSEQ [®] <i>Listeria</i> species Detection Kit	PTM 021108	RTE meats and stainless steel
	MicroSEQ [®] <i>Listeria monocytogenes</i> Detection Kit	PTM 011002	RTE meats and stainless steel

^a RTE = Ready-to-eat. RTE meats tested were deli turkey, deli ham, hot dogs, liver pate, and raw fermented sausage.