Microbiological Methods & Bacteriological Analytical Manual (BAM)

The FDA sets scientific standards for testing foods for various contaminants. Laboratories and food companies worldwide use these standards to make sure that food products are safe to eat and drink.

FDA Bacteriological Analytical Manual Online (BAM) (/Food/FoodScienceResearch/LaboratoryMethods/ucm2006949.htm)

FDA's Bacteriological Analytical Manual (the BAM) is the agency's preferred laboratory procedures for the detection in food and cosmetic products of pathogens (bacterial, viral, parasitic, plus yeast and mold) and of microbial toxins. The complete BAM is now available online and will be updated as needed.

Additional FDA Microbiological Methods

- <u>Testing Methodologies for E. coli O157:H7 and Salmonella species in Spent Sprout Irriga-</u> tion Water (or Sprouts) (PDF: 622KB) (/downloads/Food/FoodScienceResearch/LaboratoryMethods/UCM467055.pdf) October 2015
- Isolation and Enumeration of Enterobacter sakazakii from Dehydrated Powdered Infant Formula (/Food/FoodScienceResearch/LaboratoryMethods/ucm114665.htm) August 2002
- Questions and Answers on Method for *E. Sakazakii* in Powdered Infant Formula (/Food/FoodScienceResearch/LaboratoryMethods/ucm114668.htm) August 2002

Environmental Testing Methods

- Testing Methodology for Listeria species or L. monocytogenes in Environmental Samples (PDF: 109KB) (/downloads/Food/FoodScienceResearch/LaboratoryMethods/UCM467056.pdf) October 2015
- Environmental Sampling and Detection of Salmonella in Poultry Houses (/Food/FoodScienceResearch/LaboratoryMethods/ucm114716.htm) October 2008
- Egg Safety Final Rule (/Food/GuidanceRegulation/GuidanceDocumentsRegulatoryInformation/Eggs/ucm170615.htm) July 2009
- Detection of Salmonella in Environmental Samples from Poultry Houses (/Food/FoodScienceResearch/LaboratoryMethods/ucm114709.htm) September 2004
- Proposed Rule: <u>Prevention of Salmonella Enteritidis in Shell Eggs During Production</u> (http://www.federalregister.gov/articles/2004/10/07/04-22476/egg-safety-proposed-rulefor-prevention-of-salmonella-enteritidis) Federal Register, September 22, 2004

Other Microbiological Methods Information

- American Public Health Association (APHA): <u>APHA (http://www.apha.org)</u> (<u>http://www.fda.gov/AboutFDA/AboutThisWebsite/WebsitePolicies/Disclaimers/de-fault.htm</u>)
- American Type Culture Collection: <u>ATCC (http://www.atcc.org/)</u> (<u>http://www.fda.gov/AboutFDA/AboutThisWebsite/WebsitePolicies/Disclaimers/de-fault.htm</u>)
- AOAC INTERNATIONAL
 - Official Methods of Analysis (http://www.eoma.aoac.org/) (http://www.fda.gov/AboutFDA/AboutThisWebsite/WebsitePolicies/Disclaimers/default.htm) Online version, 18th ed., Revision 2, 2007
 - Final Report and Executive Summaries from the AOAC International Presidential Task Force on Best Practices in Microbiological Methodology (/Food/FoodScienceResearch/LaboratoryMethods/ucm124900.htm)
 (http://www.fda.gov/AboutFDA/AboutThisWebsite/WebsitePolicies/Disclaimers/default.htm)
 August 2006
- Centers for Disease Control and Prevention: <u>Diagnosis and Management of Foodborne III-</u> <u>nesses: A Primer for Physicians (http://www.cdc.gov/mmwr/pre-</u> <u>view/mmwrhtml/rr5002a1.htm)</u> @ (http://www.fda.gov/AboutFDA/AboutThisWebsite/Web-<u>sitePolicies/Disclaimers/default.htm)</u>
- Health Protection Branch, Health and Welfare Canada: <u>Compendium of Analytical Methods</u> (http://www.hc-sc.gc.ca/fn-an/res-rech/analy-meth/microbio/index-eng.php) (http://www.fda.gov/AboutFDA/AboutThisWebsite/WebsitePolicies/Disclaimers/default.htm)
- International Organization for Standardization (ISO): <u>Listeria monocytogenes enumeration -</u> <u>ISO 11290-2:1998(E) (http://www.iso.org/iso/iso catalogue/catalogue tc/catalogue de-</u> <u>tail.htm?csnumber=25570)</u> (<u>http://www.fda.gov/AboutFDA/AboutThisWebsite/Web-</u> <u>sitePolicies/Disclaimers/default.htm</u>): "Microbiology of food and animal feeding stuffs -Horizontal method for the detection and enumeration of *Listeria monocytogenes* - Part 2: Enumeration method." (1998; available for purchase from ISO)
- Food Safety and Inspection Service, USDA (http://www.fsis.usda.gov/wps/portal/fsis/topics/science/laboratories-and-procedures/guidebooks-and-methods/microbiology-laboratory-guidebook/microbiology-laboratory-guidebook): USDA/FSIS Microbiology Laboratory Guidebook, 3rd edition, 1998 with revisions, 2014

<u>CFSAN Laboratory Quality Assurance Manual</u> (/Food/FoodScienceResearch/LaboratoryMethods/ucm2006948.htm)

Microbiological Methods & Bacteriological Analytical Manual (BAM) (/Food/FoodScienceResearch/LaboratoryMethods/ucm114664.htm) <u>Drug & Chemical Residues Methods</u> (/Food/FoodScienceResearch/LaboratoryMethods/ucm2006950.htm)

Elemental Analysis Manual (EAM) for Food and Related Products (/Food/FoodScienceResearch/LaboratoryMethods/ucm2006954.htm)

<u>Macroanalytical Procedures Manual (MPM)</u> (/Food/FoodScienceResearch/LaboratoryMethods/ucm2006953.htm)

<u>Pesticide Analytical Manual (PAM)</u> (/Food/FoodScienceResearch/LaboratoryMethods/ucm2006955.htm)