



FOOD TESTING LAB SERVICES

EMSL

EMSL Analytical, Inc.'s Food Division caters to the analytical testing needs of the Food and Beverage Industries. Microbiology, Chemistry to include Nutritional Labeling, and Specialty Analysis testing services highlight our areas of expertise.

Work for this division is currently performed at our St. Louis, Chicago, Houston, Indianapolis, Raleigh, Minneapolis, Toronto, and Corporate New Jersey lab facilities. Our network of laboratories can be incorporated into various programs as needed. We are ISO17025: 2005 accredited via the American Association of Laboratory Accreditation (A2LA). Contact EMSL today for our most current list of accredited laboratories.

EMSL employ FDA/BAM, AOAC, USP, and CMMEF methodologies (along with client specific methods where applicable) to generate verification data for food safety and quality programs that support Global Food Safety Initiatives, Hazard Analysis and Critical Control Points (HACCP) plans, current Good Manufacturing Practices (GMP), and Food Safety Modernization Act programs.

We also provide support for new product development for the food industry by creating FDA-compliant (2020) Nutritional Facts Panels utilizing laboratory-based analysis, database analysis, or a combination of both. EMSL may also support new product development by conducting real-time and accelerated shelf life studies.

In addition to providing full-spectrum testing service, we offer sampling supplies to our clients. EMSL's Special Project and Materials Science Division works closely with our Food Division to offer full service analysis for specialty projects and atypical testing needs. We provide cutting edge technology to provide MALDI-TOF bacterial identifications, Whole Genome Sequencing (WGS), and Metagenomics. Contact us today to discuss your atypical challenge.

Key tests include* (but are not limited to) the following:

FOOD MICROBIOLOGY

- Pathogen Testing
 - *Salmonella*
 - *Listeria*
 - *E. coli* O157:H7
 - Shiga Toxin-Producing *E. coli* (STEC)
 - *Campylobacter*
 - Additional tests available
- Indicator Organism Testing
 - APC (Aerobic Plate Count)
 - YM (Yeast/Mold)
 - Total Coliform/*E. coli*
 - Lactic Acid Bacteria
 - *Enterobacteriaceae*
 - *Staphylococcus aureus*
 - Additional tests available
- Bacterial and Fungal Identification via VITEK-MS

FOOD CHEMISTRY

- Nutritional Analysis
 - Mandatory NLEA Analysis
 - Restaurant Packages
 - Nutritional Database Approach
 - Pet Food Packages
- Proximate Testing
 - Moisture/Solids/Loss on Drying
 - Protein
 - Fat
 - Ash (Residue on Ignition)
 - Carbohydrates by Difference
 - Calories
 - Total Dietary Fiber
 - Crude Fiber
 - Salt (as NaCl)
 - Sugar Profile
 - Alcohol Content

- Wet Chemistry
 - Titratable Acidity
 - Rancidity of Fats
 - Peroxide Value
 - Free Fatty Acids
 - TBA (Thiobarbituric Acid)
- Organic Acids (HPLC)
- Vitamins and Minerals Testing
 - Nutritional Minerals
 - Heavy Metals and Lead
 - Trace Minerals
 - Vitamins A, C, and D
- Color Analysis
 - Hunter L.a.b.
 - ICUMSA
 - Lovibond
- Contaminant Identification
 - Foreign Materials Identification
 - Multi-residue Pesticide Analysis
 - Artificial Colors by HPLC
 - Mycotoxins (Aflatoxin, Ochratoxin, Deoxynivalenol, Zearalenone, etc.)
 - Allergens (by ELISA): Egg, Milk, Soy, Casein, Shellfish, Gluten/Gliadin, Peanut, Treenuts, Sesame as well as many others

SPECIALTY ANALYSIS

- Shelf-Life Studies
- Challenge Studies
- FDA Detain

