COMPLETE SOLUTIONS FOR MEAT AND POULTRY ANALYSIS

Instrumentation, Consumables, Software, and Service

PerkinElmer® For the Better
WORKFLOW

SOLUTIONS FOR EACH STEP IN YOUR PROCESS

1. Primary Processing
   - SLAUGHTER AND PRIMARY PROCESSING
     - Rapid Microbiology and Pathogens:
       - E. coli O157
       - Salmonella spp.
       - Aerobic Counts
       - Total Coliforms
   - Veterinary Residues:
     - Antibiotics
     - Beta-agonists (Ractopamine)
     - Hormones
   - Process Monitoring:
     - Fat
     - Protein
     - Moisture
     - Ash
   - Micronutrient Analysis:
     - Minerals
     - Fatty Acids
     - Vitamins
     - Amino Acids

2. Further Processing
   - RENDERING
     - Process Control:
       - Fat
       - Protein
       - Moisture
       - Ash
     - Rapid Microbiology and Pathogens:
       - Yeast and Molds
       - Listeria spp.
       - Listeria Monocytogenes
       - Salmonella
   - READY-TO-EAT PROCESSED MEATS
     - Process Control:
       - Rheology (RVA)
       - Fat
       - Protein
       - Moisture
       - Ash
     - Rapid Microbiology and Pathogens:
       - E. coli O157
       - Salmonella spp.
       - Aerobic Counts
       - Total Coliforms
   - QA/QC LABORATORY
     - Rapid Microbiology and Pathogens:
       - Veterinary Residues and Contaminants
     - Nutrition and Composition
     - Sample Prep and Automation

Providing efficient, end-to-end solutions to ease challenges of automation, throughput, service, and time to results.

Click on each step in the meat- and poultry-testing process to learn more about our solutions.
FOOD SAFETY

**Rapid Microbiology and Pathogens** Plant operators have important considerations to take when choosing the right pathogen testing workflows. Most critically, testing methods must meet inclusivity, exclusivity, and robustness requirements to ensure reliability, accuracy, and precision of the method, certified by AOAC or ISO17025.

**Veterinary Residues** Whether you are screening raw materials or certifying product releases, meat and poultry processors must verify antibiotic and hormone-free claims to ensure they comply with the regulatory requirements of the country of export.

**KEY FOOD SAFETY SOLUTIONS:**

**Solus** *E. coli* O157, *Salmonella*
Our easy-to-use, efficient method for detecting *E. coli* O157 in food and environmental samples delivers full results in about 18 hours.

**MaxSignal ELISA Kits**
Used for quantitative analysis, our broad range of antibiotic residue screening kits are validated for use in meat and poultry tissues such as muscle, liver, and kidney.

**Dynex DS2**
Labs with higher sample throughput use the Dynex DS2 automated solution to improve laboratory workflow, which significantly reduces technician time and increases the capacity for testing.

[Click here to explore our solutions at a glance.]
FOOD QUALITY

Raw materials in meat are prone to composition variations. It’s important to achieve fast, accurate measurements, and our solutions enable you to confidently measure macronutrients such as fat, moisture, protein, and collagen – simultaneously, in just seconds. Ensure you get the quality raw meats you pay for, reduce your lean-meat give away, and ensure final product quality.

DA 7350
For mechanically separated chicken, our advanced, modern, and versatile in-line NIR instrument measures bulk products in pipes, chutes, chain conveyors, and more. Read our application note for more information.

DA 6200
For meat processors, our advanced, portable NIR transmission instrument makes it easy to verify raw material compositions, improve consistency, and ensure quality of finished products. Read our application note for more information.

It’s imperative to quantify the contents in food products prior to use and in final product – not only for safety and quality, but also to satisfy regulatory label-claim requirements.

Avio ICP-OES
Our sensitive and reliable instrument analyzes toxic, nutritional, and essential elements for food quality and safety monitoring.

LC 300 UHPLC
Primarily for vitamin and amino acid analysis, this system provides superior performance and sensitivity with ultraprecise gradient flows for even the most demanding applications.

Clarus GC
For testing fatty acid composition and volatile organic compounds (VOCs), our instrument delivers the performance you need and works seamlessly with most sample introduction systems.

Click here to explore our solutions at a glance.
FURTHER PROCESSING

RENDERING

Process control is paramount for establishments seeking to derive efficiency and value through their rendered ingredient operations. Our analyzers also help in optimizing the entire workflow, reducing safety margins and rework for measuring ingredients such as meat and bone meal (MBM) product, chicken byproduct meal, bone meal, and feather meal. With fast, accurate results, adjustments can be made in real time to better meet target values.

FEATURED PRODUCTS:

DA 7440
Our advanced, versatile, over-the-belt NIR instrument is installed over conveyor belts to measure fat, moisture, and protein of meat products. You can measure coarsely ground raw meats or in-process samples – the instrument continuously measures and stores results, which can then be used to characterize and summarize an entire batch. You can even use measurements to reduce fluctuations in fat in real time to improve product quality.

Read our application note about analyzing meat and bone meal with our DA 7250.

FT 9700
Ideal for food and agricultural analysis, our compact, high-performance, full-wavelength-range fourier transform near infrared (FT-NIR) spectrometer features a touchscreen interface and low-maintenance design and delivers accurate results in less than 30 seconds.

NetPlus
A powerful networking and reporting software suite for NIR, NIT, and FTIR instruments, NetPlus monitors production, verifies quality of ingredient shipments, and updates you on the latest analyses. It can harmonize and seamlessly update calibrations across production lines to ensure the highest accuracy and precision.

Click here to explore our solutions at a glance.
ANALYZING READY-TO-EAT PROCESSED MEATS

In a fast-paced food manufacturing environment, it’s critical to process environmental swab samples quickly and efficiently. This enables production facilities to take corrective actions quickly when necessary.

**Listeria** When *listeria* or *listeria monocytogenes* is detected, labs must have the flexibility to cope with increasing sample volumes while extensive investigative sampling is being processed, maximizing throughput without the need for additional resources.

**FEATURED PRODUCTS:**

**Rapid Visco Analyzer 4800**
From testing binder characteristics to optimizing breading and batter ingredient blends, our system can be used at all stages of the production process to enhance your offerings. [Watch a video to learn more from our experts.](#)

**Solus One Listeria**
A highly efficient assay for next-day detection of *Listeria* spp. in environmental samples, our Solus One Listeria kit provides a negative or a presumptive positive result from a single enrichment step in under 25 hours. Plus, its performance is backed by AOAC-PTM and NF validations.

**DA 7250**
Our fast, accurate, easy-to-use NIR meat analyzer is ideal for determining fat, moisture, protein, collagen, salt, ash, water activity, and more in raw meat, in-process samples, and finished meat products – in less than 10 seconds. Features and benefits include:

- Precalibration
- Touchscreen operation
- Little to no cleaning
- IP65 certified sanitary design

[Read our app note to learn more about analyzing raw meat and meat products using the DA 7250 NIR analyzer.](#)

Click here to explore our solutions at a glance.
RESIDUES AND CONTAMINANTS VIOLATIONS

Veterinary drug residues and contaminants are monitored worldwide by many government and private contract laboratories to enforce regulations in domestic and international food trade. Our proven solutions ensure compliance with maximum residue levels (MRLs), or tolerances, set by regulatory agencies worldwide.

FEATURED PRODUCTS:

Qsight LC-MS/MS
We’ve paired the industry’s most flexible mass spectrometer with the equally capable Qsight LX50 UHPLC system, delivering all the sensitivity and specificity you need for demanding applications such as pesticide- and veterinary-residue analysis.

LC 300
With features and benefits such as five available detectors, ultraprecise gradient flows, low dispersion, and new Simplicity™ Chrom CDS software, our LC 300 systems provide improved workflows, throughput, and usability – whether you need the ruggedness of conventional HPLC or the proven benefits of UHPLC.

NexION ICP-MS
Due to its ability to see low levels in complex matrices, this system is ideal for determining trace metals in food samples according to USP guidelines.

Read our application note to learn about our multiclass multiresidue method for detecting veterinary drugs in chicken by UHPLC-MS/MS.
AT YOUR SERVICE

OneSource is the single-service organization that understands your needs around service and support, delivering a customized systems approach to your success.

- Asset Optimization – Asset Genius Monitoring
- Multivendor Services
- Lab Relocation Services
- Instrument Qualification Services
- Laboratory Compliance
- Remote Support Services
- Education and Training
SOFTWARE THAT SETS THE BAR

Get the most out of your analysis with the right software. NetPlus, E-Notebook™, and TIBCO Spotfire® software solutions make it easy for you to generate and analyze data and share insights with internal and external colleagues. When you combine your instrument with a software platform that provides a broad range of features and capabilities, you’re allowing yourself more flexibility to achieve the results you want.

NetPlus Software
A cloud solution, this software is a reporting and networking platform that allows 24/7 access to results and instrument configuration. Features and benefits include:
- Central access to results provides an overview on operations, from raw materials to finished products
- Central product configurations on fleet of instruments to ensure harmonized results
- Ability to prepare new instruments for operation by synchronizing product configurations from the cloud
- Align instruments and optimize accuracy by slope/intercept adjustments and re-predicting new calibration models
- Access through a web browser on your laptop
- Hosted on the Amazon Web Services (AWS) cloud, with advanced security protocol, data backup, and integrity
- All data is automatically synchronized in an encrypted format

E-Notebook
Trade labor-intensive, unreliable paper-based processes for our intuitive, flexible, and collaborative electronic lab notebook (ELN). E-Notebook has modules and capabilities for chemistry, formulations, biology, and material science disciplines – it’s the perfect enterprise-wide solution for your organization.

TIBCO Spotfire
Quickly uncover insights into your data with simple-to-use and easy-to-build TIBCO Spotfire dashboards. Mine scientific and business data with ease, and gain insights in real-time. And, with TIBCO Spotfire, you can import data from disparate sources and gain insights in just minutes.
Whether you’re testing for residues and contaminants in meat products, or nutrition and composition in poultry samples, we have the right solution to answer all your analysis needs, from instrumentation to accessories to software and service.