



DuPont Qualicon

*Advancing global diagnostic
solutions*

Bilgehan Süer

***Commercial Lead, Turkey, Middle East, North
Africa and CIS***

DuPont Qualicon

Provides innovative, genetics-based diagnostic products

Systems are practical solutions offering

- Speed
- Accuracy
- Reliability
- Reproducibility
- Ease of Use

...delivering measurable business value for customers worldwide



Innovative Solutions for Food Safety and Quality



BENEFITS FOR CONSUMERS

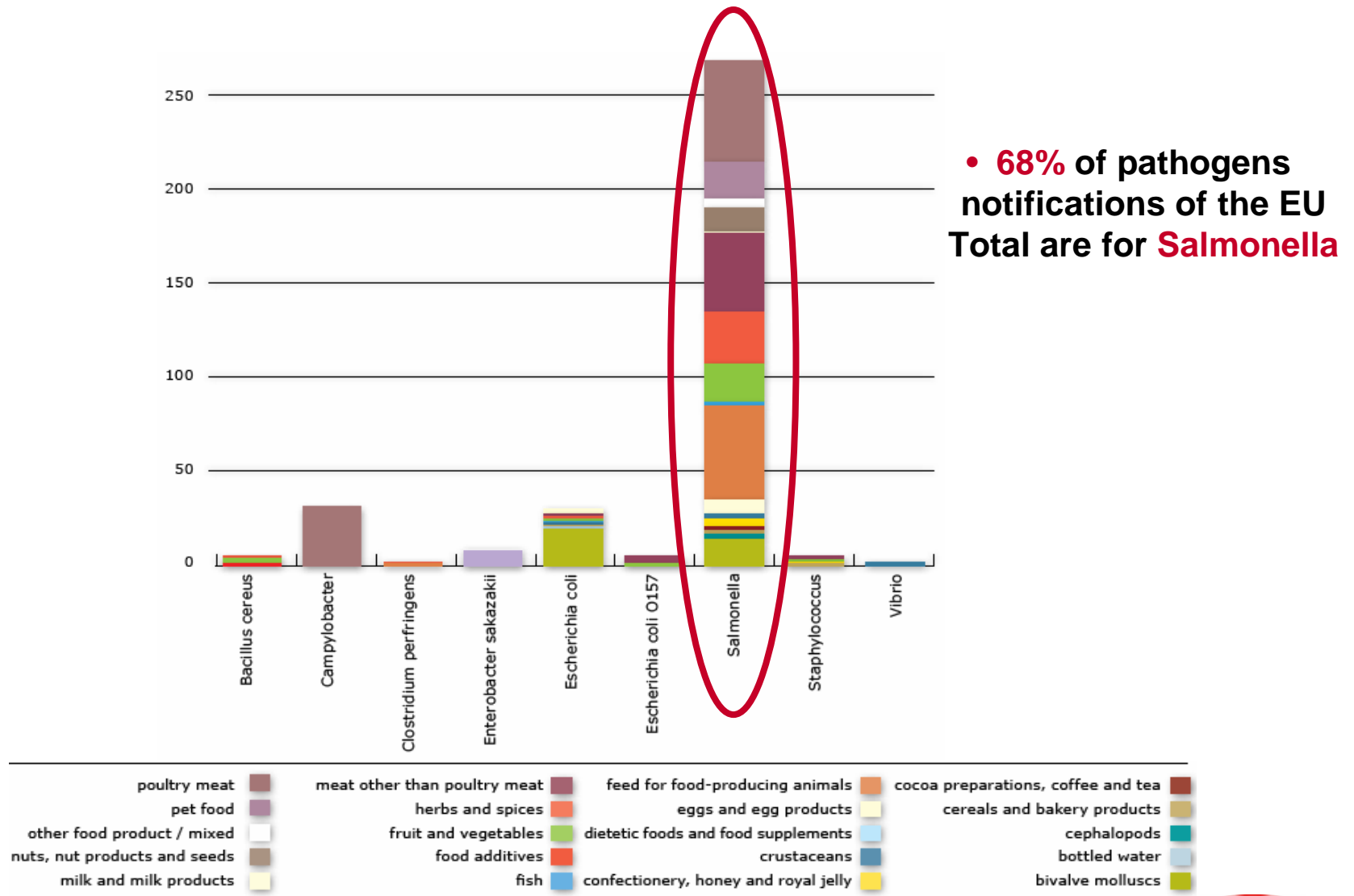
- Food Safety is a public issue
- More than 200 known diseases are transmitted through food, In 2005, more than 1.8 million people worldwide died from contaminated food and drinking water
- Delivering safer food is required to boost consumer confidence

BENEFITS FOR OUR CUSTOMERS

- Rapid pathogen results in hours, not days
- Pro-actively avoid product recalls
- Cost effective pathogen testing
- Automated results that require no interpretation
- Pro-active HACCP implementation
- Helping to maintain Brand Value



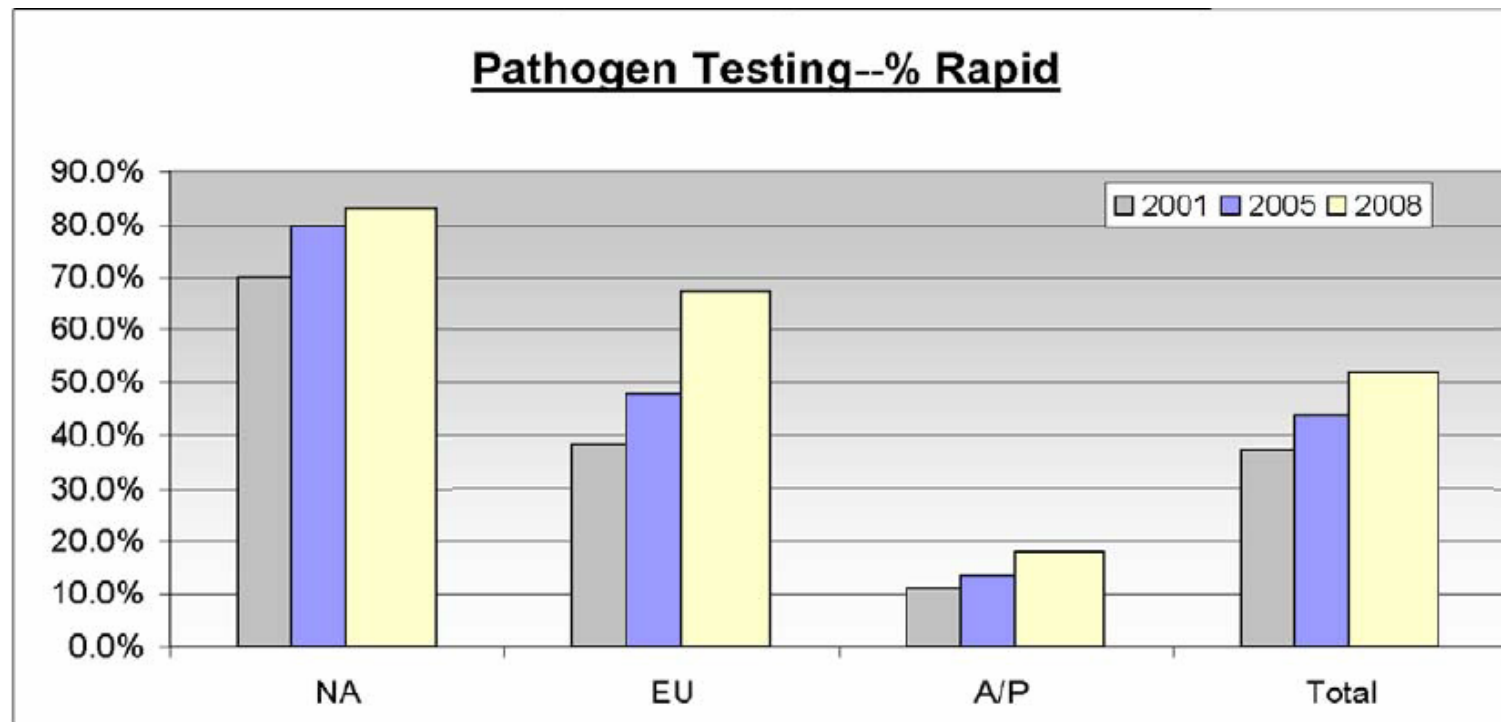
Notifications for Pathogenic micro-organisms:



Source: http://ec.europa.eu/food/food/index_en.htm



Pathogen Testing Methods Trends by Region



Source: Food Micro—2008 to 2013, © 2008 Strategic Consulting, Inc.

DuPont Qualicon

We answer your questions

*Is it
there?*



Lateral Flow[®]
Pathogen Quick Test

*Which organism is it?
Have I seen it before?..where?..when?
Where is it coming from?*



BAX[®] System
Pathogen Detection



RiboPrinter[®] System
Bacterial Identification &
Characterization

DuPont Qualicon BAX® System for detecting contamination



- Solutions for enhanced productivity
 - Screen incoming ingredients to prevent contamination from entering plant
 - Fast sample turnaround and results speed product release and help extend shelf life at consumer level
 - Effect of remediation efforts can be evaluated more quickly
 - LIMS-compatible data



BAX® System for detecting contamination



- Solutions for ease of use
 - Automated processing, detection and analysis
 - Clearly visible results, minimizing operational errors
 - Minimal hands-on time

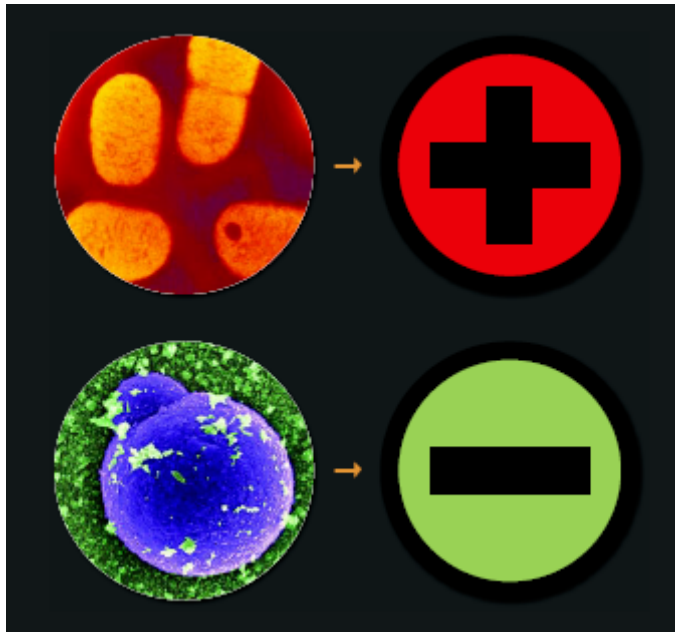
BAX® System for detecting contamination



- Solutions for food safety
 - Certified by AOAC, AFNOR, NordVal
 - Adopted by USDA FSIS
 - Validated by government labs in China, Russia, Brazil, Canada, Japan

BAX® Detection System

Fast, accurate pathogen detection



PCR assays

Salmonella
Listeria
L. monocytogenes
E. coli O157:H7
Enterobacter sakazakii
•Campylobacter
•Yeast & Mold (Multiplex)

•Tableted reagents, packaged in PCR tubes

Automated closed-cap systems - reduce potential for contamination
User friendly – non-technical interface to produce reliable results
Standardization & confidence - operator to operator reproducibility
Share data easily – Electronic LIMS-compatible storage & retrieval
Authorized thermal cycler with license to perform PCR

Enrichment media

E. coli O157:H7
Listeria



BAX® System Kits Portfolio

✓ Standard kits for detecting:

- ✓ *Salmonella*
- ✓ *E. coli* O157:H7
- ✓ *E. coli* O157:H7 MP (multiplex)
- ✓ Genus *Listeria*
- ✓ Genus *Listeria* 24E
- ✓ *Listeria monocytogenes*
- ✓ *Listeria monocytogenes* 24E
- ✓ *Enterobacter sakazakii*
- ✓ Yeast and mold

✓ Real-time kits for detecting:

- ✓ *Campylobacter jejuni/coli/lari*
- ✓ *E. coli* O157:H7
- ✓ *Staphylococcus aureus*
- ✓ *Vibrio cholerae/parahaemolyticus/vulnificus*

✓ Reverse-transcriptase kits for detecting:

- ✓ *Listeria* species

New Launch: BAX® System Real-Time PCR Assay for E. coli O157:H7

Real-time assay with real world features

- **Highly accurate** – detects all known E. coli O157:H7, including rough strains
- **Specific** – demonstrates 100% exclusivity in AOAC studies
- **Reliable** – developed in collaboration with USDA ARS
- **Real-world sample sizes**
 - 65 g ground beef
 - 375 g beef trim
 - 25 g spinach and lettuce
- **Real-time processing** – complete in 55 minutes
- **Single-stage enrichment** in MP media
- **Same-day results** – as little as 10 hours for some matrices



BAX[®] System Listeria Portfolio

- Fast – Reliable - Accurate
- 5 Listeria products to cover different needs in speed, sensitivity and versatility
 - BAX[®] System PCR Assay for *L. monocytogenes* & for Genus 24E
 - BAX[®] System PCR Assay for *L. monocytogenes* & for Genus
 - BAX[®] System Reverse-Transcriptase PCR Assay for Listeria species

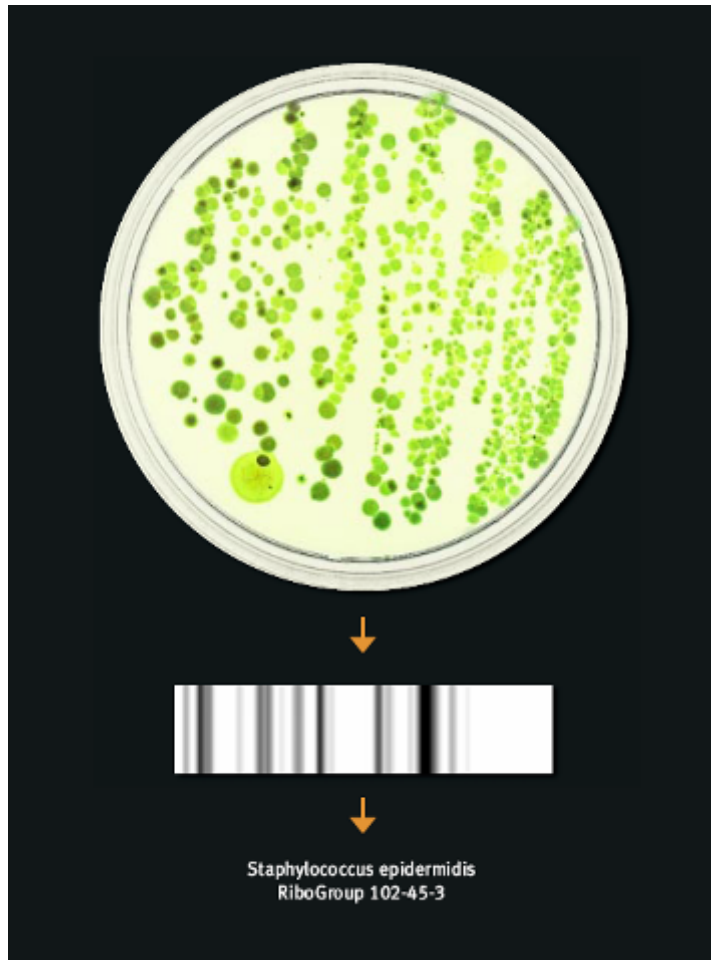


DuPont Qualicon RiboPrinter® System for tracing contamination



- Solutions for productivity
 - Map microbial environment of the plant
 - Monitor bacterial trends (bacterial load)
 - Track and trace contamination events
 - Pinpoint source of contamination for targeted remediation instead of total plant shutdown

RiboPrinter® System for tracing contamination



- Solutions for ease of use
 - Automated processing with minimal hands-on time
 - Generates clear “fingerprint” and automatically compares to database of 7000 identified patterns
 - Automatic, standardized identification of bacteria
- Solutions for food safety
 - Built-in data security and audit trails



RiboPrinter® Microbial Characterization System

Identification and characterization of bacteria



Batch kits

Eco RI
Pvu II
No enzyme

Validation packages

