



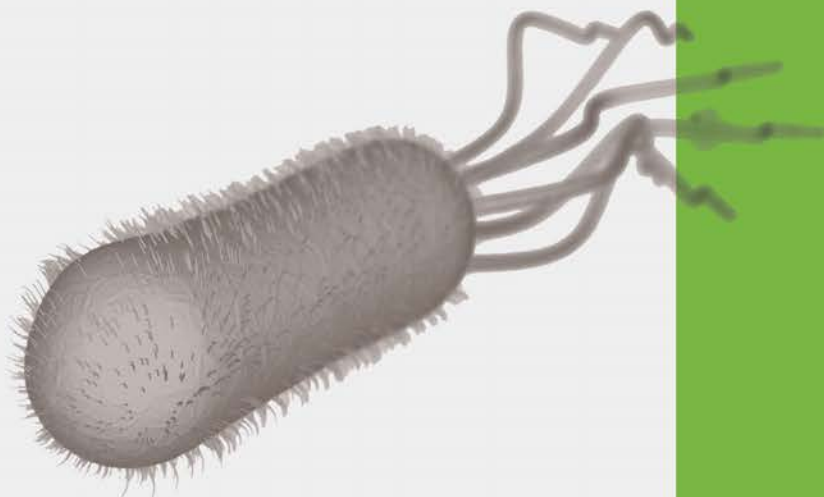
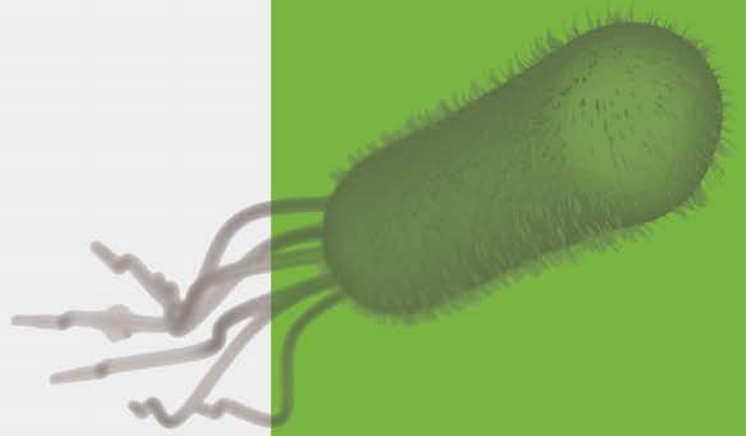
# MicroSnap™

Rapid Microorganism Detection



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# Better food safety by getting results **sooner.**

When it comes to microorganism testing, traditional and rapid methods still don't meet the speed and ease-of-use demands of food and beverage processors. Companies need same-day results so product can be released quickly and environmental contamination can be averted or minimized. MicroSnap™ is the only test that addresses these needs with same-shift results from an easy-to-use test.

MicroSnap offers significant improvements over traditional and other methods by reducing time, costs, and improving usability. The tests detect a larger dynamic range than traditional tests, making it flexible for a variety of applications. With MicroSnap, companies receive results sooner, become more efficient, and most importantly, improve food safety.



Instructional Demonstration Video



YouTube [youtube.com/HygienaTV](https://www.youtube.com/HygienaTV)

	Traditional Methods	MicroSnap™
Rapid Results	-	+
Labor and Material Savings	-	+
Wide Dynamic Range*	-	+
Probability of Detection	-	+
Easy to Use	+	+
Easy Sample Prep	+	+
Sensitivity	+	+
Specificity	+	+
Quantitative Results	+	+

\* MicroSnap range without sample dilution: 10-10,000 CFU.  
Traditional: 15-300 CFU.

# Rapid results **where** you need them most.



## Raw Material Testing

Screen for microbiological contamination before materials go into processing.

- Prevent contaminated raw materials from entering production
- Avoid costly hold times that shorten raw material shelf life
- Prevent equipment down time and lost earning potential
- Quickly verify Certificates of Analysis on raw materials
- Move materials into production sooner to return investment faster



## Plant Environmental Monitoring

Test environmental surfaces and equipment for same-day bacterial results of plant hygiene.

- Prevent environmental contamination from affecting several days of product
- Rapidly evaluate the effectiveness of cleaning and sanitation
- Show due diligence to auditors and customers
- Identify and troubleshoot problem areas in hours versus days
- Reduce outside laboratory costs by processing samples in-house

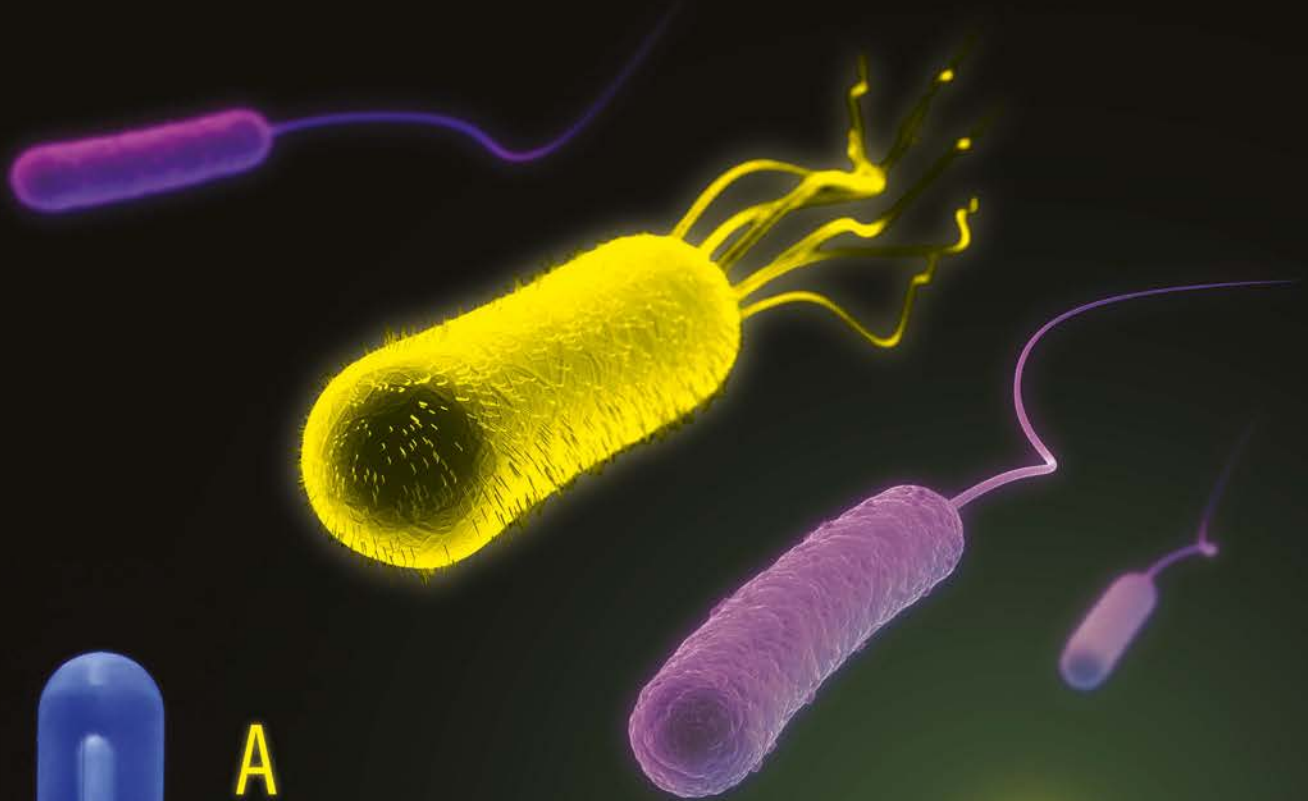


## Finished Product Testing

Verify microorganism levels sooner for quicker release and better quality assurance.

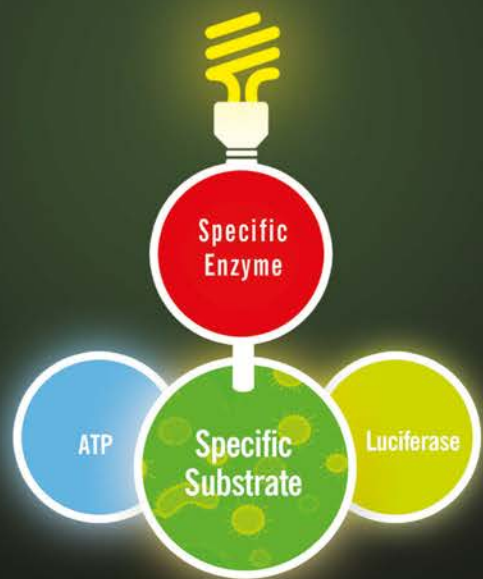
- Release time-sensitive products sooner
- React to contamination before product ships
- Prevent costly recalls
- Protect your brand name and reputation
- Test finished products in-house to cut outside laboratory costs





## A new light on microbial detection.

MicroSnap is a rapid bioluminescent test method for the detection and enumeration of bacteria, giving actionable test results in less than 8 hours. The MicroSnap test platform consists of an Enrichment Device containing a specific growth medium and a Detection Device containing a bioluminescent (light-producing) substrate. When MicroSnap detects the specific microorganism, light is emitted and measured with Hygiena's EnSURE™ luminometer. Results are stored and tracked with Hygiena's complimentary SureTrend software for further data analysis and trending.

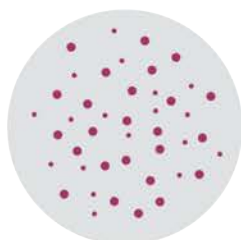


# No more counting colonies.

## CFU

### Colony Forming Units

Traditional plating methods utilize colony counting techniques to determine CFU levels. MicroSnap technology derives equivalent CFU values using light detection.



## RLU

### Relative Light Units

EnSURE displays measurements in relative light units (RLU's). The RLU number is correlated to colony forming units (CFU's). Total, Coliform, and *E. coli* are AOAC-RI Performance Tested<sup>SM</sup> Methods.



## CFU : RLU - Conversion

CFU/ml or swab*		<i>E. coli</i>	Coliform	Enterobacteriaceae**	Total
<10	↔	<2	<2	NA	<10
<20	↔	<4	<4	NA	<20
<50	↔	<7	<7	<10	<50
<100	↔	<12	<12	<20	<100
<200	↔	<20	<20	<40	<200
<500	↔	<35	<35	<100	<500
<1,000	↔	<60	<60	<200	<1,000
<5,000	↔	<180	<180	<1,000	<5,000
<10,000	↔	<300	<300	TNTC	TNTC

\*Direct sample e.g., 1 mL liquid or surface swab. Dilution factors must be accounted for with product samples.

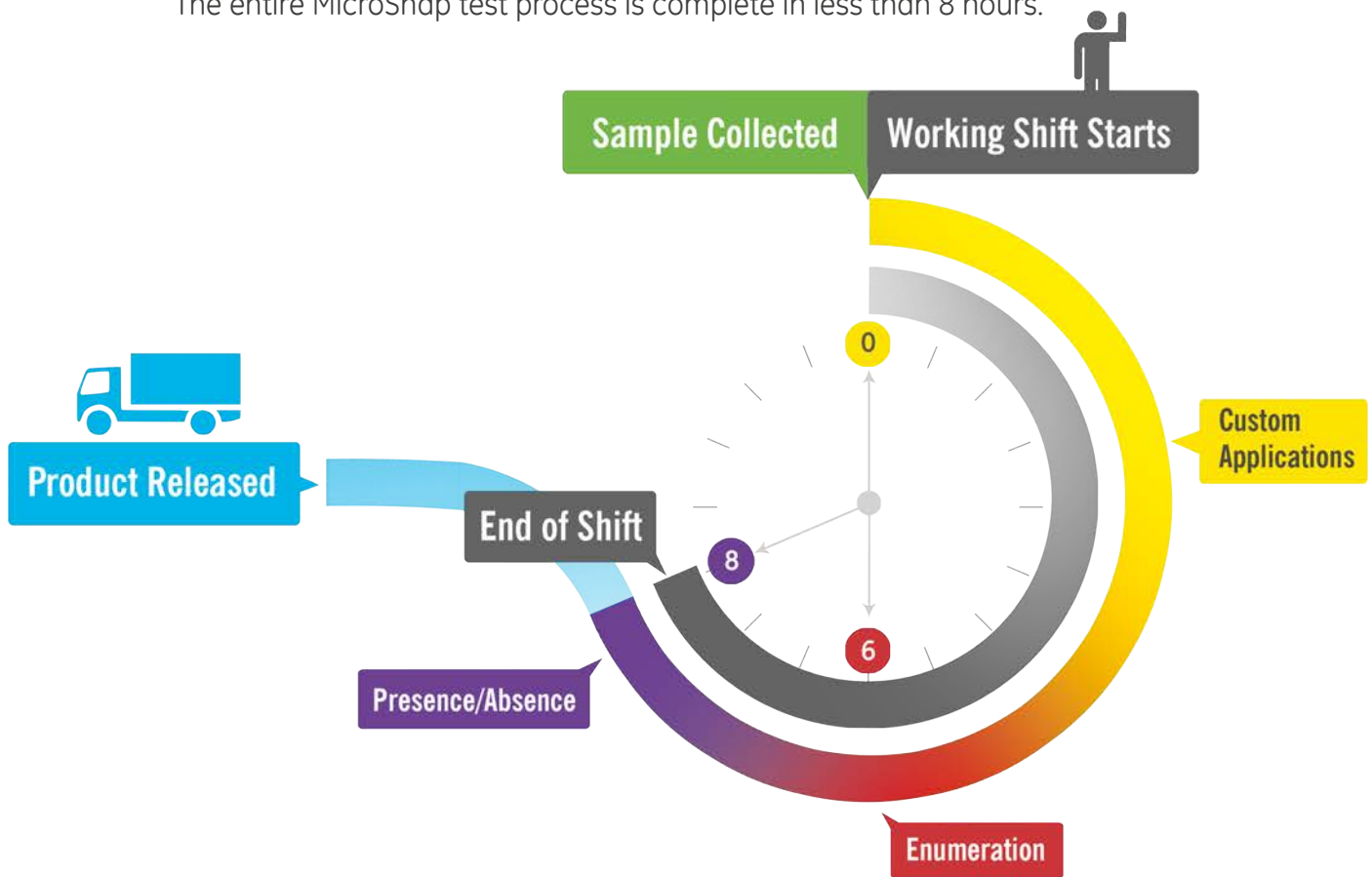
\*\*Data reflects dynamic range after 6 hour incubation. See product instructions for more details.

## Method Comparison : Time to Results



# Same-shift results.

The entire MicroSnap test process is complete in less than 8 hours.



## < 8 hours: Presence/Absence

Sample is collected and enriched at the beginning of the shift and incubated for up to 8 hours, depending on the test format.

## 6-7 hours: Enumeration

Sample is collected and enriched at the beginning of the shift and incubated for 6-7 hours, depending on the test format.

## < 6 hours: Custom Applications

MicroSnap™ can deliver results even faster for applications with high detection limits. Contact us for customized instructions for your specific application.

E-mail your request to [info@hygiena.com](mailto:info@hygiena.com)

# Microbiology in a Snap

MicroSnap's efficient design makes microorganism testing easier than ever. Each device's patented **Snap-Valve** holds a precise amount of specific enrichment broth, ready to be used for either product or surface samples. Within the enrichment device is a **built-in pipette**, enabling convenient and efficient transfer of enriched sample to the detection device. After activation, the detection device delivers final results in ten minutes, making the total time to results **8 hours or less**. That means less time waiting for lab results or counting plates.



## Additional Benefits

### Reduce Materials



No serial dilutions to make.



Fewer replicates required.

### Eliminate Lab Costs



Reduce lab fees.



No expensive overnight shipping.

### Reduce Inventory Costs



Shorter product hold time.



Less inventory in warehouse.



# Available Tests:

## MicroSnap™ *E. coli*



### Detection Times:

Enumeration - 6 hours  
Presence/Absence - 8 hours

Instructional Video Online

### Part No:

Enrichment Device - MS1-CEC  
Enrichment Broth - MS1-CEC-BROTH-2ML  
Enhanced Nutrient Broth - MS1-N-BROTH-9ML  
Enhanced EB Broth - MS1-EB-BROTH-9ML  
Detection Device - MS2-ECOLI

### Detects:

*E. coli*



## MicroSnap™ Coliform



### Detection Times:

Enumeration - 6 hours  
Presence/Absence - 8 hours

Instructional Video Online

### Part No:

Enrichment Device - MS1-CEC  
Enrichment Broth - MS1-CEC-BROTH-2ML  
**New!** Enhanced Nutrient Broth - MS1-N-BROTH-9ML  
**New!** Enhanced EB Broth - MS1-EB-BROTH-9ML  
Detection Device - MS2-COLIFORM

### Detects:

*E. coli*  
*Klebsiella*  
*Citrobacter*  
*Enterobacter*



## MicroSnap™ Enterobacteriaceae



### Detection Times:

Enumeration - 6 - 7 hours  
Presence/Absence - 8 hours

Instructional Video Online

### Part No:

Enrichment Device - MS1-EB  
**New!** Enhanced EB Broth - MS1-EB-BROTH-9ML  
Detection Device - MS2-EB

### Detects all species within the Enterobacteriaceae family including:

<i>E. coli</i>	<i>Serratia</i>
<i>Klebsiella</i>	<i>Shigella</i>
<i>Citrobacter</i>	<i>Salmonella</i>
<i>Enterobacter</i>	<i>Yersinia</i>

## MicroSnap™ Total Viable Count



### Detection Times:

Enumeration - 7 hours

Instructional Video Online

### Part No:

Enrichment Device - MS1-TOTAL  
Enhanced Nutrient Broth - MS1-N-BROTH-9ML  
Detection Device - MS2-TOTAL

### Detects Gram positive and Gram negative aerobic and facultative bacteria, including:

<i>E. coli</i>	<i>Staphylococcus</i>
<i>Listeria</i>	<i>Pseudomonas</i>
<i>Shigella</i>	
<i>Vibrio</i>	
<i>Bacillus</i>	



# EnSURE™

## One Instrument | Multiple Tests

EnSURE is a quality monitoring system that uses a single instrument to collect and analyze data from multiple quality tests. Using new state-of-the-art technology and patented designs, the EnSURE system is an easy-to-use, flexible, and accurate quality monitoring system for the entire line of MicroSnap products. In addition, EnSURE measures tests for surface, water, and high-sensitivity ATP, and specific enzymes.



### System Details:

- Stores up to 5,000 locations, 200 User ID's, 100 test plans
- Runs on 2 AA batteries for several months of use
- Advanced photodiode sensor is stable and robust
- No required calibration or yearly maintenance
- PC compatible via USB
- Part No: ENSURE

## Additional Tests:

### UltraSnap™ : Surface ATP



UltraSnap™ is a user-friendly surface ATP test device with a pre-moistened swab bud for better recovery of test sample.

Part No: US2020

### AquaSnap™ : Water ATP



AquaSnap™ detects the presence of ATP in liquid samples. This pen-sized test device accurately monitors biomass and organic residue in water or liquid samples. Part No: AQ100FX/AQ100X

### SuperSnap™ : Allergen Prevention



SuperSnap™ is a high-sensitivity ATP test device for surfaces and also an effective tool to for the prevention of allergen cross contamination, or when dealing with difficult samples.

Part No: SUS3000

### CrossCheck: Acid Phosphatase



CrossCheck measures acid phosphatase enzyme activity on finished products to verify thermal processing and on food contact surfaces to measure raw meat residue hazards.

Part No: CX-3000

### ZymoSnap ALP: Alkaline Phosphatase



ZymoSnap ALP measures alkaline phosphatase enzyme activity in milk and dairy samples for 5-minute verification of pasteurization efficacy.

Part No: ZS-ALP-100

# SureTrend™

## Data Analysis Software

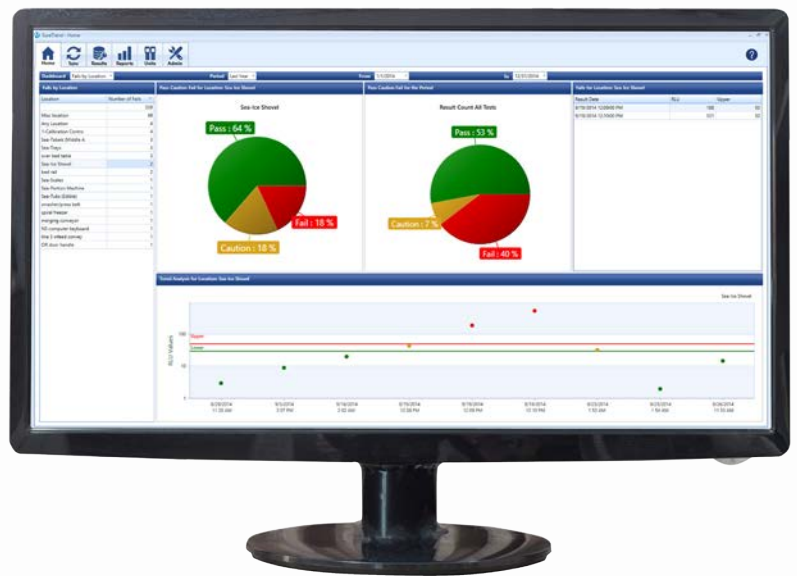
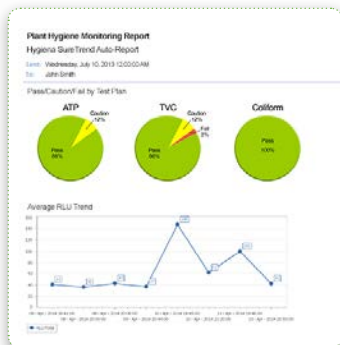
### Pre-loaded Reports

Customizable and makes data analysis fast and easy.



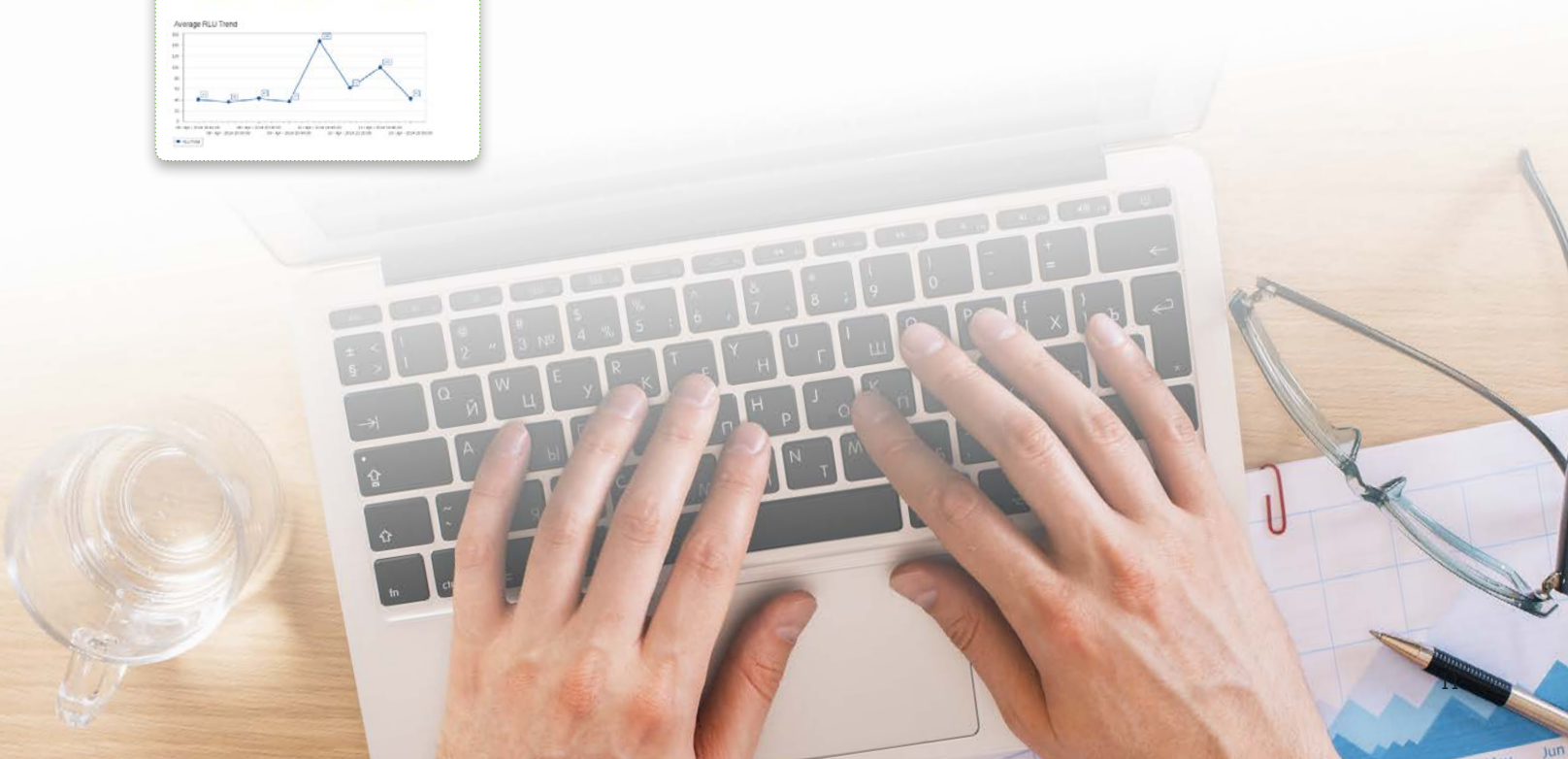
### Automated E-mails

Keeps you up to speed on facility hygiene levels.



### The Dashboard

Puts important data right in front of you.



## Step 1: Enrichment

### PRODUCT

Enrichment Device: Coliform, *E. coli*  
Enrichment Device: Enterobacteriaceae  
Enrichment Device: Total Viable Count  
Enrichment Broth: Coliform, *E. coli*  
9 mL Enhanced Nutrient Broth: Total, Coliform, & *E. coli*  
9 mL Enhanced EB Broth: EB, Coliform, & *E. coli*  
Digital Dry Block Incubators

### CATALOG NO.

MS1-CEC  
MS1-EB  
MS1-TOTAL  
MS1-CEC-BROTH-2ML  
MS1-N-BROTH-9ML  
MS1-EB-BROTH-9ML  
See website

### QTY

100  
100  
100  
100  
100  
100  
1

## Step 2: Detection

### PRODUCT

MicroSnap *E. coli* Detection Device  
MicroSnap Coliform Detection Device  
MicroSnap Enterobacteriaceae Detection Device  
MicroSnap Total Viable Count Detection Device

### CATALOG NO.

MS2-ECOLI  
MS2-COLIFORM  
MS2-EB  
MS2-TOTAL

### QTY

100  
100  
100  
100

EnSURE Monitoring System & SureTrend Software

ENSURE

1



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