



# MicroSnap<sup>TM</sup>

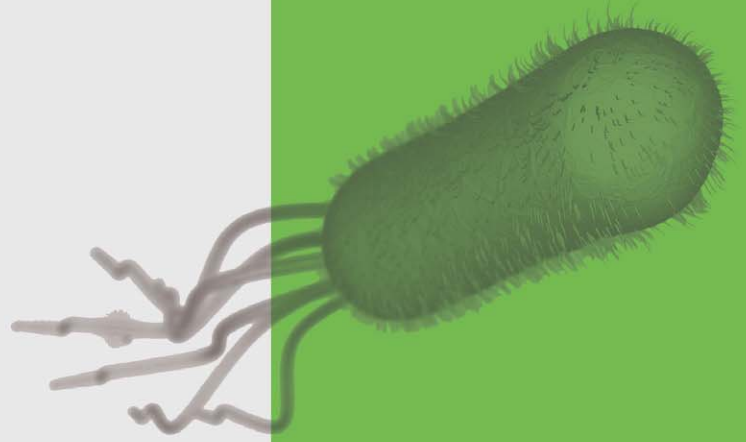
RAPID MICROORGANISM DETECTION



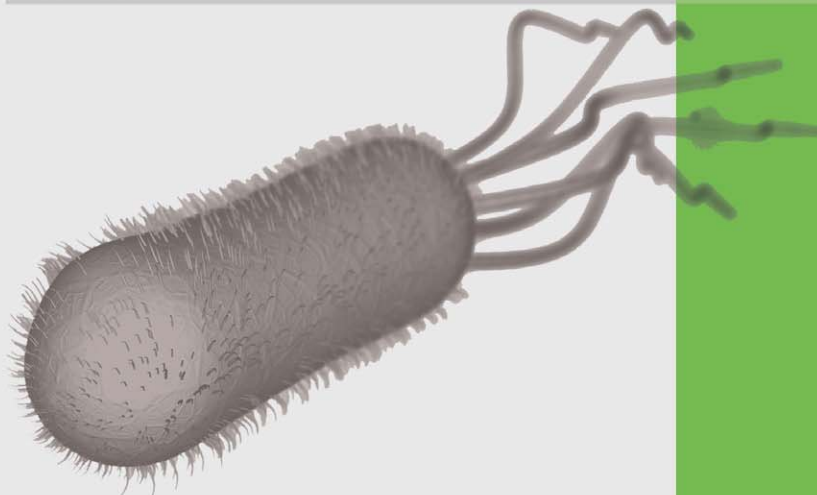
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# Better food safety by getting results **sooner.**

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



	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.



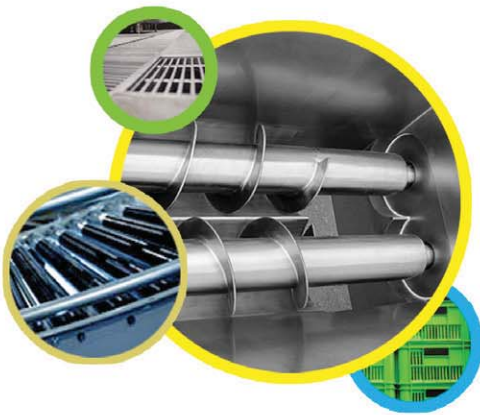
# Rapid results **where** you need them most.



## 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

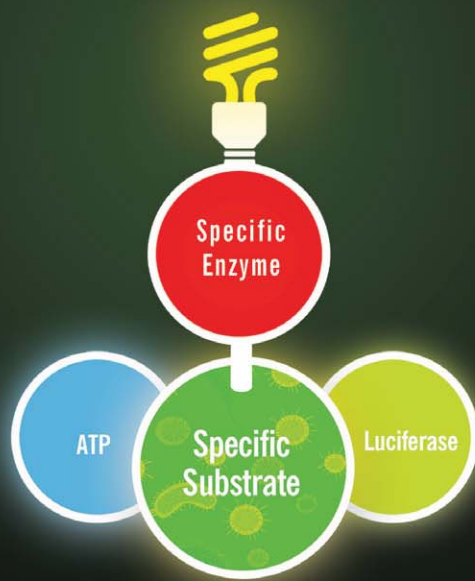
Verify microorganism levels sooner for quicker release and better quality assurance.

- 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 bioluminogenic 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 bioluminogenic (light-producing) substrate. When MicroSnap detects the specific microorganism, light is emitted and measured with Hygiene's EnSURE luminometer. Results are stored and tracked with Hygiene's complimentary SureTrend software for further data analysis and trending.



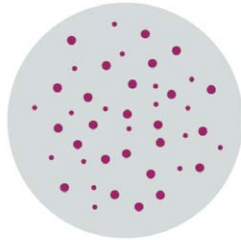


# No more counting colonies.

## 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). Coliform and *E. coli* are AOAC-RI Performance Tested<sup>SM</sup> Methods.

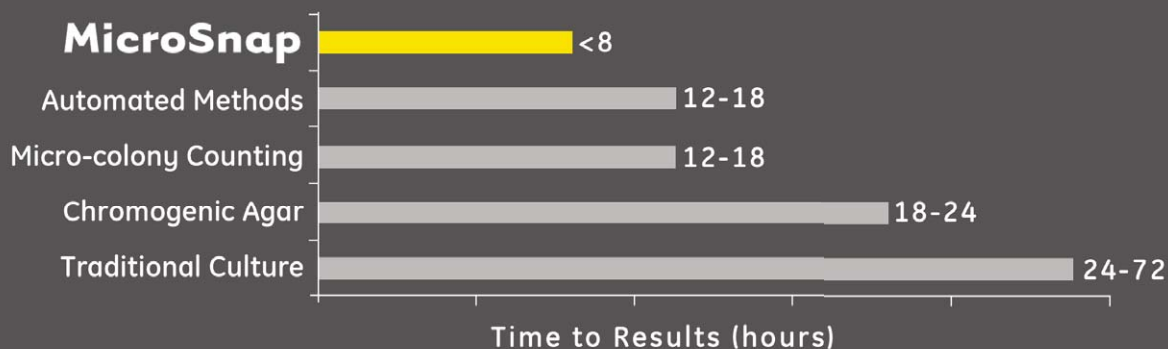


## CFU : RLU - Conversion

CFU/ml*		<i>E. coli</i>	Coliform	Enterobacteriaceae	TVC
<10	↔	<2	<2	<7	<10
<20	↔	<4	<4	<15	<20
<50	↔	<7	<7	<35	<50
<100	↔	<12	<12	<70	<100
<200	↔	<20	<20	<140	<200
<500	↔	<35	<35	<350	<500
<1,000	↔	<60	<60	<700	<1,000
<5,000	↔	<180	<180	<3,500	<5,000
<10,000	↔	<300	<300	<7,000	<10,000

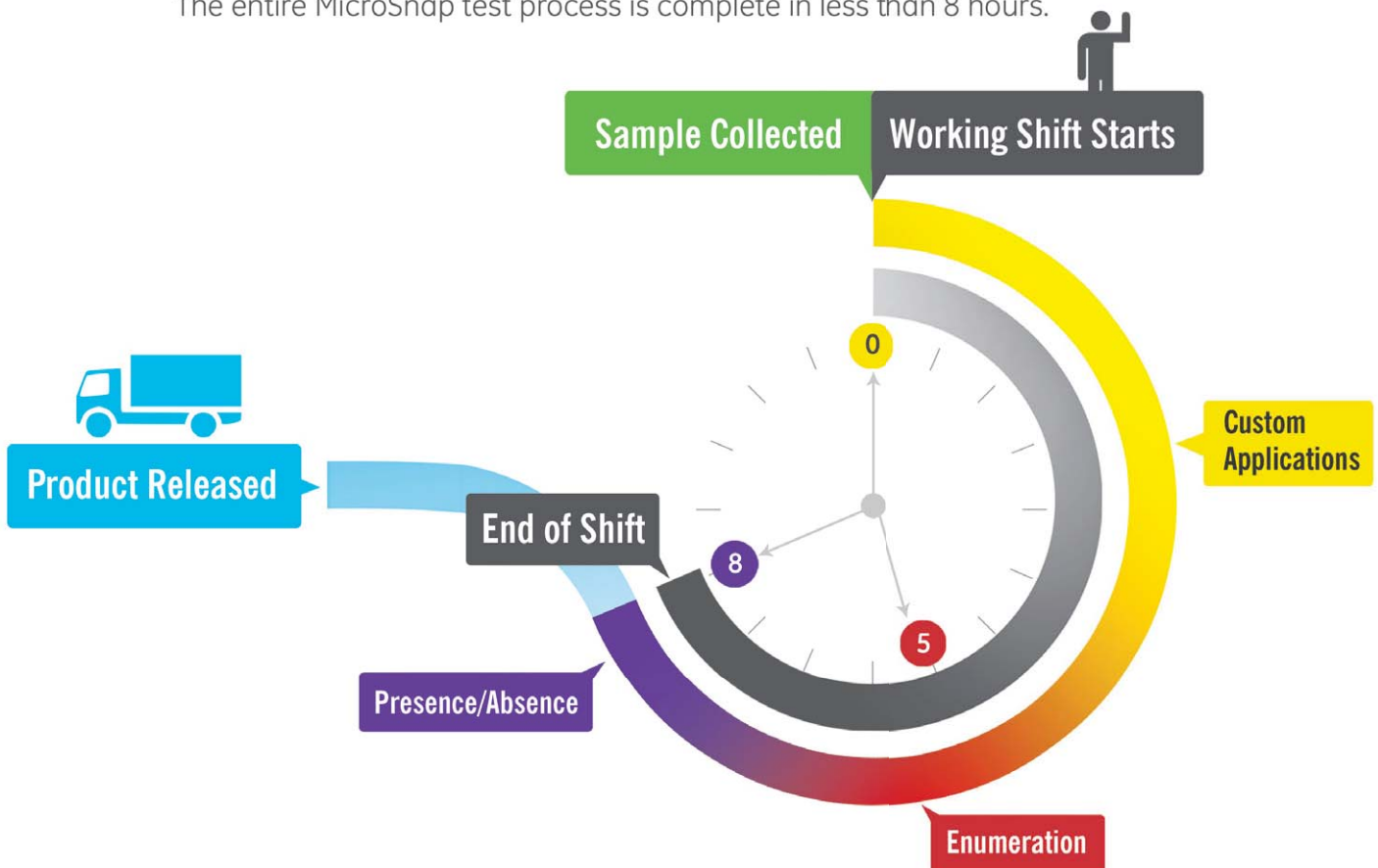
\*This data is for environmental surface tests. Dilution factors must be accounted for with product samples.

## 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.

## 5-7 hours: Enumeration

Sample is collected and enriched at the beginning of the shift and incubated for 5-7 hours, depending on the test format.

## < 5 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@hygiene.com](mailto:info@hygiene.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 Swab - MS-E-CEC  
Enrichment Broth - MS-E-CEC-BROTH  
**New!** Enhanced Nutrient Broth - MS-E-EN-9BROTH  
Detection Device - MS-ECOLI

**Detects:**  
*E. coli*



## MicroSnap

### Coliform



#### Detection Times:

Enumeration - 6 hours  
Presence/Absence - 8 hours

Instructional Video Online

#### Part No:

Enrichment Swab - MS-E-CEC  
Enrichment Broth - MS-E-CEC-BROTH  
**New!** Enhanced Nutrient Broth - MS-E-EN-9BROTH  
Detection Device - MS-COLIFORM

**Detects:**  
*E. coli*  
*Klebsiella*  
*Citrobacter*  
*Enterobacter*



## MicroSnap

### Enterobacteriaceae



#### Detection Times:

Enumeration - 5 hours

Instructional Video Online

#### Part No:

Enrichment Swab - MS-E-EB  
Detection Device - MS-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 Swab - MS-E-TOTAL  
**New!** Enhanced Nutrient Broth - MS-E-EN-9BROTH  
Detection Device - MS-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, Alkaline Phosphatase, and Acid Phosphatase.



### 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

### ZymoSnap: Alkaline Phosphatase



ZymoSnap measures alkaline phosphatase (ALP) enzyme activity in milk and dairy products to check for effective pasteurization.

Part No: ZS-ALP

### 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

Find additional product details online.

# SURETrend Data Analysis Software



## The Dashboard

Puts important data right in front of you.

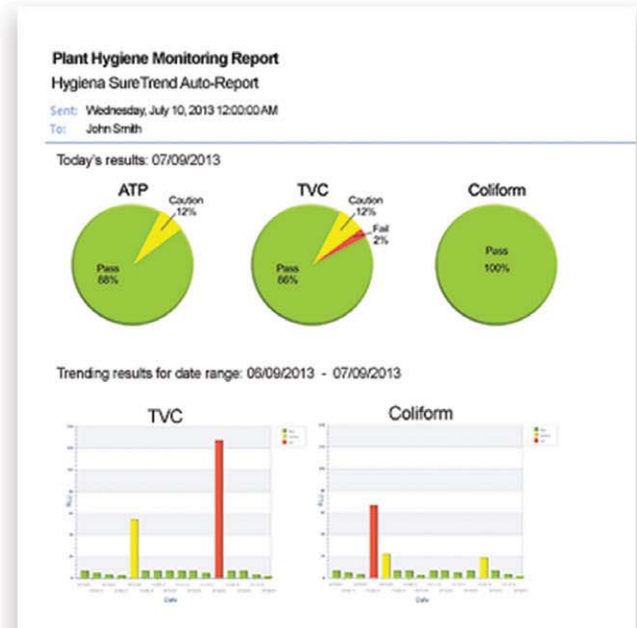
## Pre-loaded Reports

Customizable and makes data analysis fast and easy.



## Automated E-mails

Keeps you up to speed on facility hygiene levels.



Learn more about **SureTrend Software** online.



# Validation & Control



## Positive Control Kit | Performance Validation

The Positive Control Kit provides validation and ongoing controls, allowing users to verify MicroSnap test devices are performing as designed and show due diligence. The kit includes 10 vials with known content and number of bacteria with instructions for use. Positive Control Kits are available for MicroSnap Coliform and *E. coli*.

Part No: MS-PC-COLIFORM/E-COLI



## Calibration Control Kit | Instrument Verification

EnSURE luminometers have an internal calibration check. When additional verification is required, the Calibration Control Kit will confirm the luminometer is within specifications and operating correctly. The kit consists of reusable positive and negative devices. In-house calibration checks confirm the system is operating correctly and demonstrates due diligence. Part No: PCD4000

# Instructions

See individual product kit inserts for detailed instructions.

Watch instructional videos at [youtube.com/HygieneTV](https://youtube.com/HygieneTV) or scan QR code to watch:



## STEP 1

Product	Surface		
		or	
<p><b>Liquid Sample:</b> Add 1mL liquid food, beverage, or water sample directly to Enrichment Device.</p>	<p><b>Surface Samples:</b> Swab a 10x10 cm area with Enrichment Swab.</p>		
<p><b>Solid Samples:</b> Add 1 mL 10% suspension of solid sample directly to Enrichment Device.</p>			<p>Incubate for the time required for desired detection levels (5-8 hrs). See individual product Kit Inserts for details.</p>

## STEP 2

<p>Allow Detection Device to equilibrate to room temperature. Shake to bring droplets of chemistry in tube to bottom of tube.</p>	<p>Transfer enriched sample to Detection Device (to fill line).</p>	<p>Activate Detection Device by breaking the Snap-Valve and squeezing. Shake gently to mix sample with the liquid.</p>	<p>Insert Detection Device into EnSURE luminometer and initiate measurement. Refer to RLU interpretation table to interpret results (page 6).</p>
		<p>Incubate Coliform and <i>E. coli</i> formats for an additional 10 minutes. (Not required for EB or Total formats.)</p>	

# Catalog Numbers

## Step 1: Enrichment

PRODUCT	CATALOG NO.	QTY
Enrichment Device: Coliform, <i>E. coli</i>	MS-E-CEC	100
Enrichment Device: Enterobacteriaceae	MS-E-EB	100
Enrichment Device: Total Viable Count	MS-E-TOTAL	100
Enrichment Broth: Coliform, <i>E. coli</i>	MS-E-CEC-BROTH	100
9 mL Enhanced Nutrient Broth: Total, Coliform, & <i>E. coli</i>	MS-E-EN-9BROTH	100
Mini Incubator (11 wells)	INCUBATOR	1
Lab Incubator (70 wells)	INCUBATOR	1

## Step 2: Detection

PRODUCT	CATALOG NO.	QTY
MicroSnap <i>E. coli</i> Detection Device	MS-ECOLI	100
MicroSnap Coliform Detection Device	MS-COLIFORM	100
MicroSnap Enterobacteriaceae Detection Device	MS-EB	100
MicroSnap Total Viable Count Detection Device	MS-TOTAL	100
EnSURE luminometer with SureTrend Software	ENSURE	1

## Positive Control Kits

PRODUCT	CATALOG NO.	QTY
Positive Control Kit for MicroSnap Coliform & <i>E. coli</i>	MS-PC-COLIFORM/ECOLI	10 vials
Calibration Control Kit for EnSURE luminometer	PCD4000	1 kit

## Related Products

PRODUCT	CATALOG NO.	QTY
UltraSnap Surface ATP Test	US2020	100
AquaSnap Free: Free ATP for Water	AQ-100FX	100
AquaSnap Total: Total ATP for Water	AQ-100X	100
SuperSnap Allergen Prevention/High Sensitivity ATP	SUS3000	100
ZymoSnap Alkaline Phosphatase	ZS-ALP	100
CrossCheck Acid Phosphatase	CX-3000	100



# Global Support

Exceptional service, live training, and support videos available 24/7



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