



Micronox®



Quanto è sicuro?



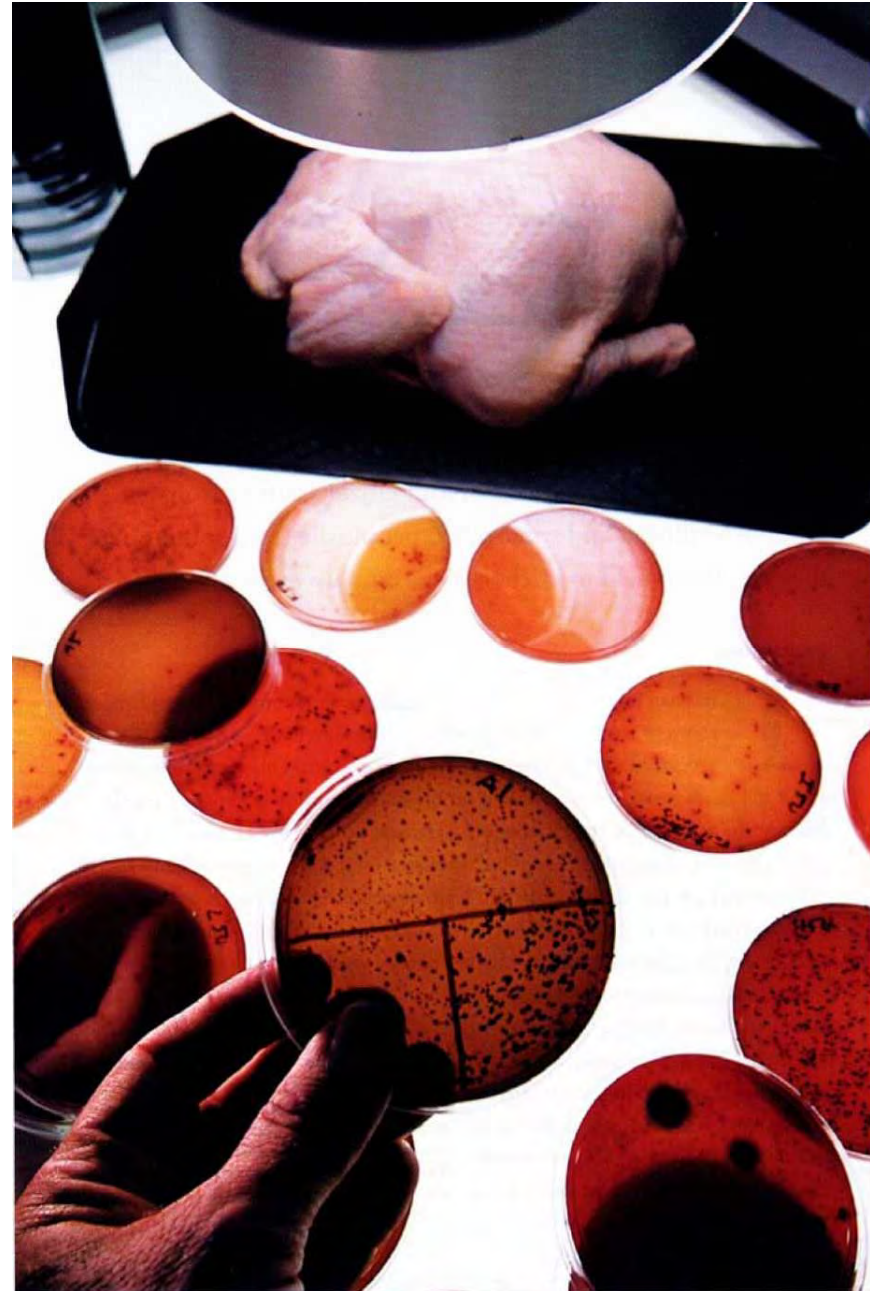
Gli Stati Uniti vantano di avere il cibo più sicuro al mondo. Forse sì, forse no. Ogni anno una persona su quattro soffre di malattie di origine alimentare e circa 5000 persone muoiono per qualcosa che mangiano. Dal campo alla cucina i rischi affiorano ovunque.

- Secondo l'Ente americano CDC (center for control disease and prevention)

- 76 milioni di Americani soffrono di malattie di origine alimentare ogni anno

- 325,000 sono ospedalizzati

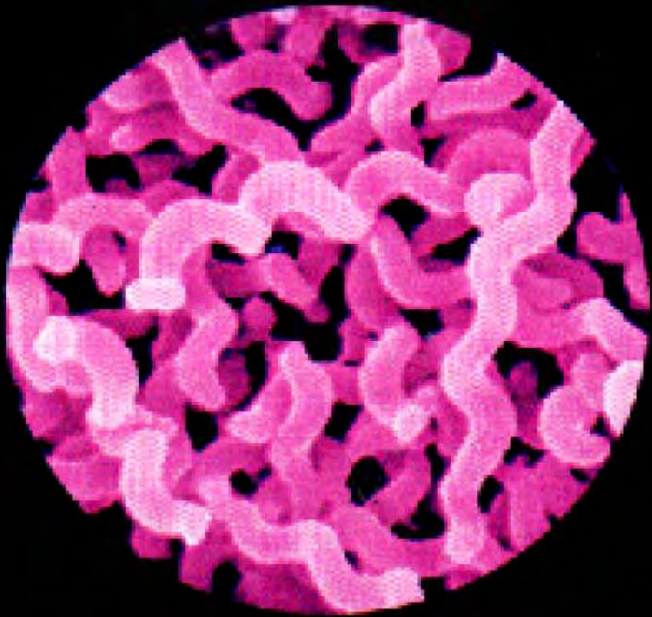
- 5000 Muoiono...



**NORMALMENTE NOI NON POSSIAMO VEDERE,
ODORARE O GUSTARE IL BATTERIO CHE CI CAUSA
LA MALATTIA.**

**Se le persone sono più malate oggi a causa del
cibo di quanto lo fossero 50 anni fa è una
questione dibattuta. Ciò che è certo è che i
patogeni sono diversi. I progressi nella
lavorazione e nelle misure igieniche nel mondo
sviluppato hanno diminuito i pericoli di origine
alimentare come il colera e il botulismo ma nuovi
rischi provengono dai cibi importati , dai
cambiamenti nella scala di produzione degli
alimenti e dalla diminuzione dei cibi cucinati in
casa.**

BATTERI COMUNI

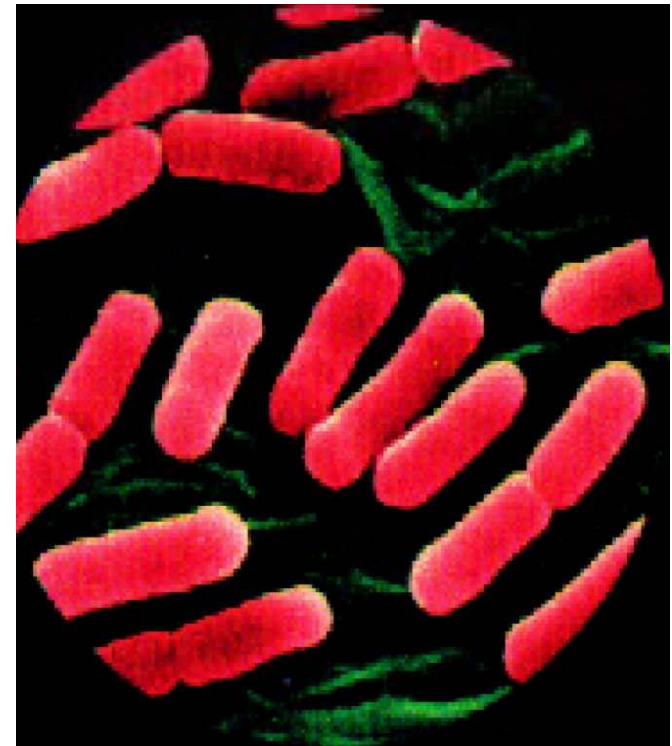


Campylobacter jejuni Comune negli allevamenti di pollame, questo batterio è diventato la principale causa di malattie batteriche di origine alimentare negli Stati Uniti. Anche l'esposizione a un ridotto numero di microbi può essere causa di malattia. La maggior parte delle persone infette vengono ricoverate entro una settimana.

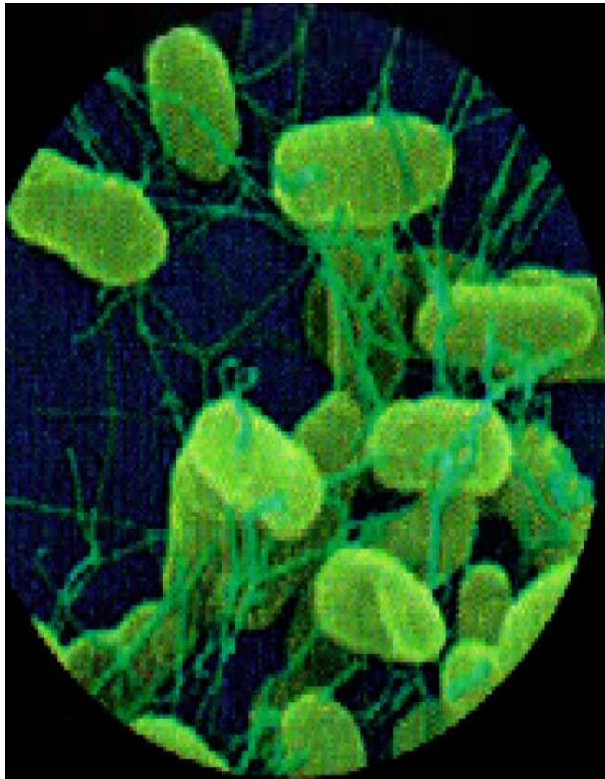
BATTERI COMUNI

Escherichia coli 0157:H7

E' stato identificato come causa di malattia per la prima volta nel 1932. Questo patogeno produce una potente tossina che causa diarrea sanguinolenta e insufficienza renale. L'infezione generalmente si contrae mangiando carne macinata poco cotta.



BATTERI COMUNI



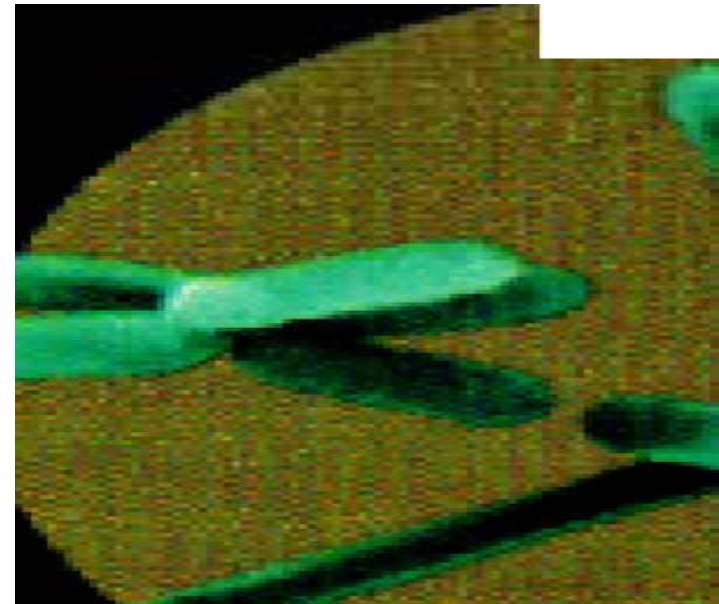
Salmonella enteritidis

Quasi ogni alimento contaminato dalle feci di animali infetti contiene il batterio della salmonella. Specialmente pollame e uova sono a rischio trasmissione. Le infezioni si sono stabilizzate ma un nuovo ceppo mostra elevati tassi di resistenza ai farmaci.

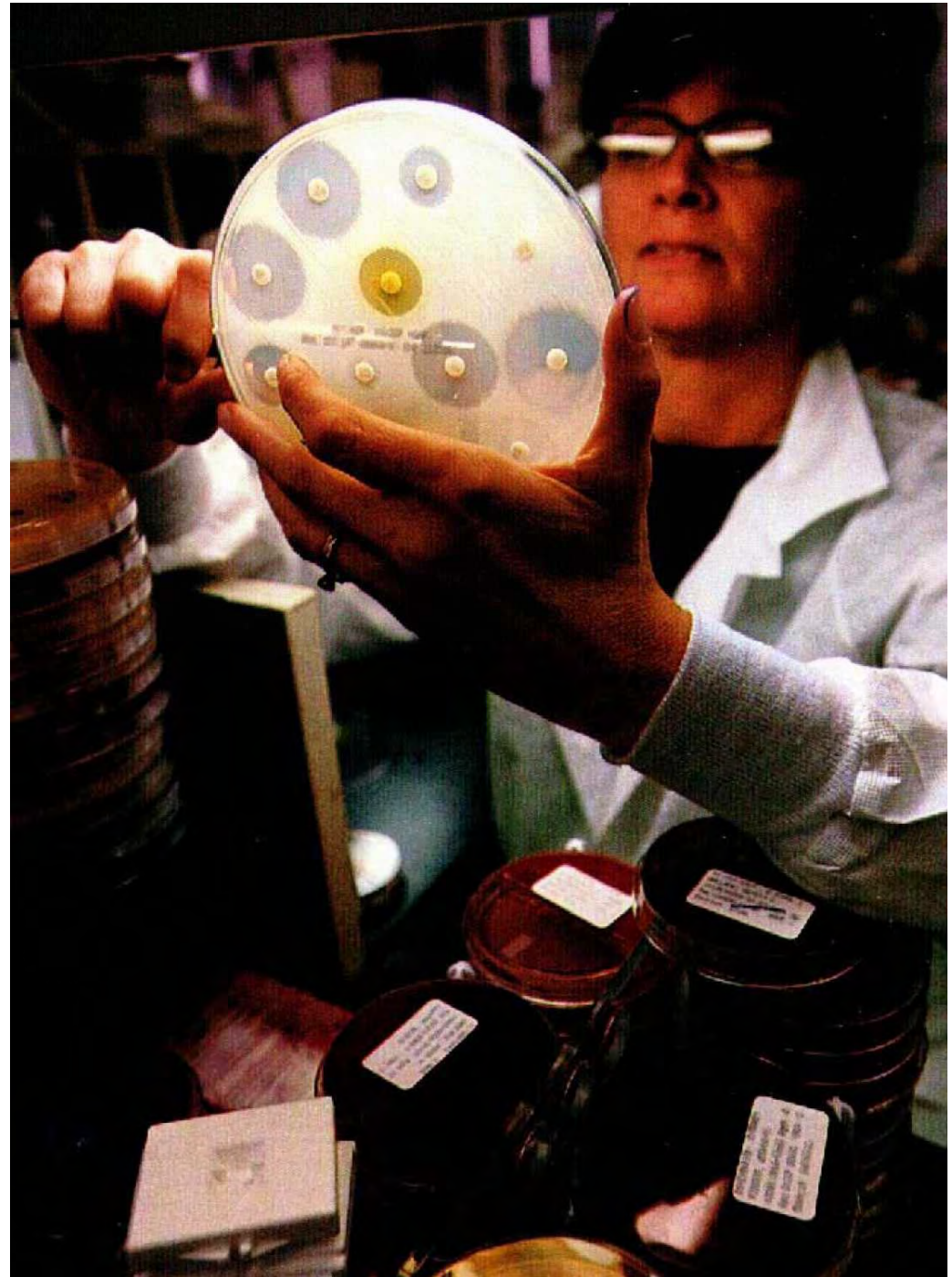
BATTERI COMUNI

Listeria monocytogenes

In grado di sopravvivere alla refrigerazione, *Listeria* si trova in molti cibi, inclusi formaggi a pasta molle e carni lavorate come gli hot dog. I più soggetti sono donne incinte, neonati, e persone con il sistema immunitario indebolito.



Ci sono 200 volte
più batteri nel
colon di un
singolo essere
umano che
esseri umani
che hanno mai
vissuto sulla
Terra...





Ogni anno circa 73.000 Americani
si ammalano e 60 muoiono - molti
sono bambini - per l' E. coli 0157:H7



Antimicrobici di grado alimentare

Additivo JAX Antimicrobico

- Da anni è incorporato nei fluidi approvati USDA H1.
- E' approvato da NSF in quanto incontra i requisiti per oli e grassi H1.
- E' registrato come Micronox®

Micronox® Independent Verification



A Subsidiary of Sommer-Frey Laboratories, Inc.

Behnke Lubricants, Inc.
Attn: Sue Bowman
W134 N5373 Campbell Drive
Menomonee Falls, WI 53051

Received Date: 6/4/02
Report Date: 7/15/02

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- CERTIFICATE OF ANALYSIS - HALO GUARD

Procedure: 100 gms of sample was weighed up for each different type of bacteria to be tested. The sample was then inoculated using the corresponding types of bacteria. The *Listeria* sample was inoculated at a level of 100,000 per gram, *Salmonella* was inoculated at a level 110,000 per gram, and *E.coli* was inoculated at a level of 120,000. Each sample was tested once initially for the presence of the bacteria before inoculation. None was found. After inoculation each sample was stored at room temperature and tested every 7-day for a total of 28 days. The samples were analyzed for *Listeria* and *Salmonella* counts using Microbial Content Test Agar that contains Lecithin and Polysorbate 80 to neutralize quaternary ammonium compounds, and Violet Red Bile Agar with MUG for *E. coli*.

Micronox® Independent Verification

Test	Result	Units	Method
Our Lab #: 02A3047-001			Sample Date: 6/3/02
Your Sample ID: INITIAL			
E. coli	None	/gm	BAM
Salmonella	None	Detected	BAM
Listeria monocytogenes	None	Detected	BAM
Our Lab #: 02A3047-002			Sample Date: 6/3/02
Your Sample ID: 7 DAYS			
E. coli	<10	/gm	BAM
Salmonella	<10	/gm	BAM
Listeria monocytogenes	<10	/gm	BAM
Our Lab #: 02A3047-003			Sample Date: 6/3/02
Your Sample ID: 14 DAYS			
E. coli	<10	/gm	BAM
Salmonella	10	/gm	BAM
Listeria monocytogenes	<10	/gm	BAM

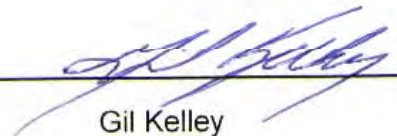
Micronox® Independent Verification

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- CERTIFICATE OF ANALYSIS -

Test	Result	Units	Method
Our Lab #: 02A3047-004			Sample Date: 6/3/02
Your Sample ID: 21 DAYS			
E. coli	<10	/gm	BAM
Salmonella	10	/gm	BAM
Listeria monocytogenes	30	/gm	BAM
Our Lab #: 02A3047-005			Sample Date: 6/3/02
Your Sample ID: 28 DAYS			
E. coli	<10	/gm	BAM
Salmonella	<10	/gm	BAM
Listeria monocytogenes	<10	/gm	BAM

Results: The sample of Halo Guard showed an immediate decrease to a count of <10 for *E. coli*, *Salmonella* and the *Listeria*. This was a significant decrease from the inoculation level for all the cultures. A few counts for *Salmonella* and *Listeria* appeared over the 28 day testing period, these counts are of little significance. This sample inhibits growth of all three of the test organisms, and will significantly decrease the population of these bacteria within 7 days.



Gil Kelley
Microbiologist

Micronox® Independent Verification



A Subsidiary of Sommer-Frey Laboratories, Inc.

Behnke Lubricants, Inc.
Attn: Sue Bowman
W134 N5373 Campbell Drive
Menomonee Falls, WI 53051

Received Date: 8/22/01
Report Date: 9/26/01

Page 1 of 2

- CERTIFICATE OF ANALYSIS -

Magna Plate 78E

Procedure: 100 gms of sample was weighed up for each different type of bacteria to be tested for. Then the samples were inoculated using the corresponding types of bacteria. The *Listeria* sample was inoculated at a level of 80,000 per gram, *Salmonella* was inoculated at a level 120,000 per gram, and *E.coli* was inoculated at a level of 100,000. Each sample was tested once initially for the presence of the bacteria before inoculation, none was found. After inoculation each sample was stored at room temperature and tested every 7-day for a total of 28 days. The samples were analyzed for *Listeria* and *Salmonella* counts using Microbial Content Test Agar that contains Lecithin and Polysorbate 80 to neutralize quaternary ammonium compounds, and Violet Red Bile Agar with MUG for *E. coli*.

Micronox® Independent Verification

Test	Result	Units	Method
Our Lab #: 01A04920-001			Sample Date: 8/13/01
Your Sample ID: Initial, Magna Plate 78E			
Listeria monocytogenes	<1	/gm	BAM
Salmonella	<1	/gm	BAM
E. coli	<1	/gm	BAM
Our Lab #: 01A04920-002			Sample Date: 8/13/01
Your Sample ID: 7 Days			
Listeria monocytogenes	<10	/gm	BAM
Salmonella	<10	/gm	BAM
E. coli	<10	/gm	BAM
Our Lab #: 01A04920-003			Sample Date: 8/13/01
Your Sample ID: 14 Days			
Listeria monocytogenes	<10	/gm	BAM
Salmonella	<10	/gm	BAM
E. coli	<10	/gm	BAM

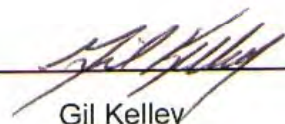
Micronox® Independent Verification

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- CERTIFICATE OF ANALYSIS -

Test	Result	Units	Method
Our Lab #: 01A04920-004			Sample Date: 8/13/01
Your Sample ID: 21 Days			
Listeria monocytogenes	<10	/gm	BAM
Salmonella	<10	/gm	BAM
E. coli	<10	/gm	BAM
Our Lab #: 01A04920-005			Sample Date: 8/13/01
Your Sample ID: 28 Days			
Listeria monocytogenes	<10	/gm	BAM
Salmonella	<10	/gm	BAM
E. coli	<10	/gm	BAM

Results: The sample of Magna Plate 78E showed an immediate decrease to a count of <10 for all three different types of bacteria. This sample shows the ability to inhibit and kill *E.coli*, *Salmonella*, and *Listeria* in a short amount of time.



Gil Kelley
Microbiologist



Micronox® “Knockdown” Performance

Listeria monocytogenes

Prima settimana

- | | |
|-----------------------|----------|
| • Poly-Guard FG-2 | - 99.79% |
| • Magna-Plate 78E | - 99.99% |
| • Conveyor-Glide | - 99.88% |
| • FGH-AW 46 | - 99.97% |
| • Halo-Guard FG-2 | >99.99% |
| • Halo-Guard Syn FG-2 | >99.99% |
| • Packer Oil 22 | - 99.07% |

Media	- 99.81%
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Micronox® “Knockdown” Performance

Listeria monocytogenes

Seconda settimana

- Poly-Guard FG-2 - 99.71%
- Magna-Plate 78E >99.99%
- Conveyor-Glide - 99.98%
- FGH-AW 46 >99.99%
- Halo-Guard FG-2 - 99.99%
- Halo-Guard Syn FG-2 >99.99%
- Packer Oil 22 >99.99%

Media - 99.95%



Micronox® “Knockdown” Performance

Listeria monocytogenes

Terza settimana

- | | |
|-----------------------|----------|
| • Poly-Guard FG-2 | - 99.96% |
| • Magna-Plate 78E | > 99.99% |
| • Conveyor-Glide | > 99.99% |
| • FGH-AW 46 | > 99.99% |
| • Halo-Guard FG-2 | - 99.97% |
| • Halo-Guard Syn FG-2 | > 99.99% |
| • Packer Oil 22 | > 99.99% |

Media	- 99.98%
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Micronox® “Knockdown” Performance

Listeria monocytogenes

Quarta settimana

- Poly-Guard FG-2 > 99.99%
- Magna-Plate 78E > 99.99%
- Conveyor-Glide > 99.99%
- FGH-AW 46 > 99.99%
- Halo-Guard FG-2 > 99.99%
- Halo-Guard Syn FG-2 > 99.99%
- Packer Oil 22 > 99.99%

Media > 99.99%



Micronox® “Knockdown” Performance

Salmonella choleraesius (typhimurium)

Prima settimana

- | | |
|-----------------------|----------|
| • Poly-Guard FG-2 | - 99.99% |
| • Magna-Plate 78E | - 99.99% |
| • Conveyor-Glide | - 99.99% |
| • FGH-AW 46 | - 99.99% |
| • Halo-Guard FG-2 | >99.99% |
| • Halo-Guard Syn FG-2 | >99.99% |
| • Packer Oil 22 | - 99.85% |

Media	- 99.97%
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Micronox® “Knockdown” Performance

Salmonella choleraesius (typhimurium)

Seconda settimana

- Poly-Guard FG-2 > 99.99%
- Magna-Plate 78E > 99.99%
- Conveyor-Glide - 99.98%
- FGH-AW 46 > 99.99%
- Halo-Guard FG-2 - 99.99%
- Halo-Guard Syn FG-2 > 99.99%
- Packer Oil 22 > 99.99%

Media - 99.98%



Micronox® “Knockdown” Performance

Salmonella choleraesius (typhimurium)

Terza settimana

- | | |
|-----------------------|----------|
| • Poly-Guard FG-2 | - 99.97% |
| • Magna-Plate 78E | > 99.99% |
| • Conveyor-Glide | > 99.99% |
| • FGH-AW 46 | > 99.99% |
| • Halo-Guard FG-2 | - 99.99% |
| • Halo-Guard Syn FG-2 | > 99.99% |
| • Packer Oil 22 | > 99.99% |

Media	- 99.99%
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Micronox® “Knockdown” Performance

Salmonella choleraesius (typhimurium)

Quarta settimana

- Poly-Guard FG-2 > 99.99%
- Magna-Plate 78E > 99.99%
- Conveyor-Glide > 99.99%
- FGH-AW 46 > 99.99%
- Halo-Guard FG-2 > 99.99%
- Halo-Guard Syn FG-2 > 99.99%
- Packer Oil 22 > 99.99%

Media > 99.99%



Micronox® “Knockdown” Performance

E. coli O157:H7

Prima settimana

- Poly-Guard FG-2 > 99.99%
- Magna-Plate 78E - 99.99%
- Conveyor-Glide > 99.99%
- FGH-AW 46 > 99.99%
- Halo-Guard FG-2 > 99.99%
- Halo-Guard Syn FG-2 > 99.99%
- Packer Oil 22 > 99.99%

Media > 99.99%



Micronox® “Knockdown” Performance

E. coli O157:H7

Seconda settimana

- Poly-Guard FG-2 > 99.99%
- Magna-Plate 78E > 99.99%
- Conveyor-Glide > 99.99%
- FGH-AW 46 > 99.99%
- Halo-Guard FG-2 > 99.99%
- Halo-Guard Syn FG-2 > 99.99%
- Packer Oil 22 > 99.99%

Media > 99.99%



Micronox® “Knockdown” Performance

E. coli O157:H7

Terza settimana

- Poly-Guard FG-2 > 99.99%
- Magna-Plate 78E > 99.99%
- Conveyor-Glide > 99.99%
- FGH-AW 46 > 99.99%
- Halo-Guard FG-2 > 99.99%
- Halo-Guard Syn FG-2 > 99.99%
- Packer Oil 22 > 99.99%

Media > 99.99%



Micronox® “Knockdown” Performance

E. coli O157:H7

Quarta settimana

- Poly-Guard FG-2 > 99.99%
- Magna-Plate 78E > 99.99%
- Conveyor-Glide > 99.99%
- FGH-AW 46 > 99.99%
- Halo-Guard FG-2 > 99.99%
- Halo-Guard Syn FG-2 > 99.99%
- Packer Oil 22 > 99.99%

Media > 99.99%