

# 3M *Micro* Messenger

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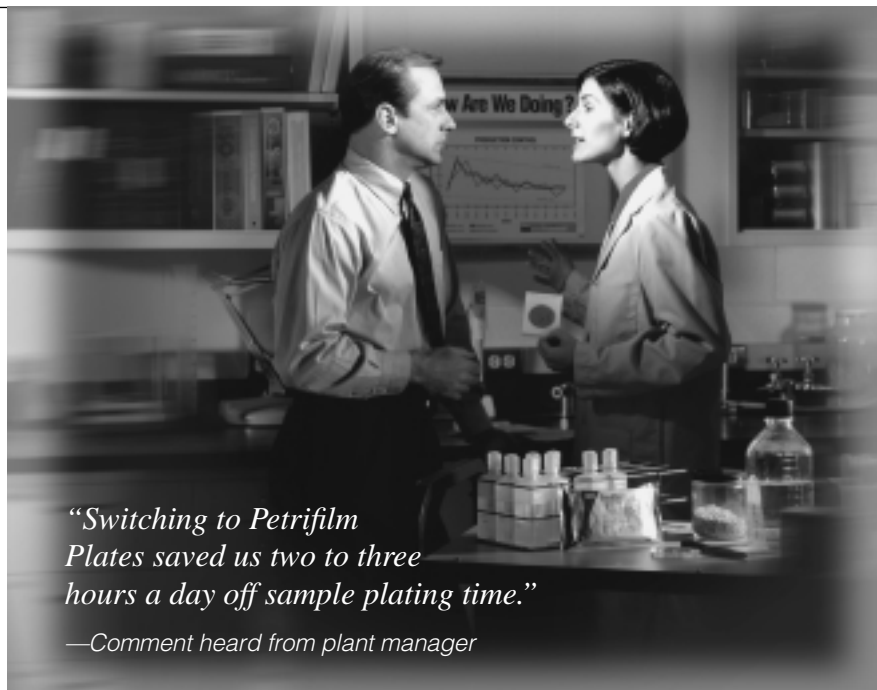
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## 3M™ Petrifilm™ Plates Cut Labor Hours Nearly in Half

When managers switch from conventional agar plates to 3M™ Petrifilm™ Plates for microbial testing, they expect to realize significant time and labor savings. Now, results of a 274-plant study conducted by 3M over the past six years have confirmed these expectations, documenting an average labor savings of 45 percent. This is a significant management issue because labor, rather than materials, is the largest cost component of microbial testing.

Operation managers around the country are placing increased importance on productivity. "Companies are pressured to increase profitability without increasing price," said Kevin McGoldrick, corporate accounts manager, 3M Microbiology. "This is especially difficult to do these days when the cost of production and raw materials is going up. One way to deal with this situation is to look internally for ways to do more with less—and 3M Petrifilm plates help accomplish that."

The tight labor market is another issue impacting plant managers. The Labor Department reported in September that the nation's



*"Switching to Petrifilm Plates saved us two to three hours a day off sample plating time."*

*—Comment heard from plant manager*

unemployment rate was at a 29-year low of 4.2 percent. "That's making it very difficult to find, train and keep skilled lab technicians," McGoldrick continued. "If a company is growing, managers may not be able to find the people necessary to complete the additional work. Petrifilm plates are tools which allow managers to complete additional work with existing trained staff. This can result in cost savings."

Cumberland Dairy of Bridgeton, NJ, was among the first plants to begin testing with Petrifilm plates more than 15 years ago. Impressed with the results, the high-volume plant switched over its sample testing to Petrifilm plates soon after the products received AAOC® Official Methods<sup>SM</sup> approvals.

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## Log On: 3M Launches Microbiology Web Site

3M Microbiology has created a new web site—

[www.3M.com/microbiology](http://www.3M.com/microbiology)

to provide customers with a fast and convenient resource for food quality information.

The site is designed for anyone involved in the food and beverage industry—food processors, food retailers, government agencies and educators alike. In addition to a wealth of technical information, the site gives users access to educational programs and industry links in order to stay current in this fast-paced field.

"We want to help our customers be as effective as they can be,"

*Continued on back*

# Blazing a Microbiology Trail in High Schools and Colleges

3M Microbiology is generating excitement about microbiology learning that is grounded in real life applications in middle schools, high schools, colleges and universities in Europe, Canada and the United States. The goal is to advance teacher and student research and understanding of the world of microorganisms and to encourage future innovations in food microbiology.

“In addition to supporting the food industry in its growth and research, we support curriculum development as well as scholarships for individual microbiologists of the future. Their ideas and initiative will continue to improve food quality and safety for generations to come,” said Cindy Knight, sales and marketing manager, 3M Canada Microbiology Products. “Both are important so schools can better educate and prepare students for careers using the latest in microbiology technology and innovative thinking.”

3M Microbiology’s academic outreach effort includes an ever-growing network of educational support programs, products and scholarships. For information about all of these initiatives, click on the “High Schools and Universities” section of...

[www.3M.com/microbiology](http://www.3M.com/microbiology)

Please pass this information along to interested educators in your area.

## 3M Bio-Partner Programme

*Ready-to-use course for training students in European universities.*

Developed in collaboration with six European universities, the 3M Bio-Partner Programme is an educational package to assist teachers in the theoretical and practical use of 3M™ Petrifilm™ Plates for microbiological analysis. With this multi-faceted teaching tool, educators can train students in an easy and reliable analytical method used by more than 3,000 companies in Europe.

The Bio-Partner course materials include a presentation on the 3M Petrifilm plate method advantages compared with the traditional petri dish method, interpretation guides for each Petrifilm plate type, photographs of inoculated Petrifilm plates, and a video program of practical application of Petrifilm plates in a plant laboratory.



Cindy Knight and Gisele Atkinson from 3M Canada Microbiology Products present the scholarship to Nora Watson.

## Canadian Scholarship Program

*Open to Canadian post-graduate students in food safety, microbiology or preservation.*

The first annual 3M Canada Post-Graduate Scholarship was awarded to Nora Watson a student at the University of Alberta, for her research on the Biopreservation of Processed Meats. 3M Canada Microbiology Products, in conjunction with the Canadian Institute of Food Science and Technology, sponsor the \$3,000 cdn scholarship. It is open to masters or doctoral degree students studying at a Canadian university in the field of food safety, microbiology or preservation.

The competitive grant recognizes innovative research addressing topics of food quality and safety. Applicants are required to write a synopsis of their research, clearly defining how their research could potentially impact the food industry.

## Secondary Education Resources

*Experiments, lesson plans and Petrifilm Plates for U.S. schools.*

3M Microbiology Products has teamed up with several 3M authorized providers who have developed school-oriented experiment kits, technical support and Petrifilm Aerobic, *E. coli*/Coliform Count, and Yeast and Mold Count Plates for teachers and students. Teaching kits with titles such as “Sun Struck Yeast” and “Hide and Seek *E. coli*,” are available to middle and high schools. Similar programs are aimed at community and technical college students in the United States.

The sample-ready Petrifilm plates are neat and ready to use. They save teachers and schools the time and expense of preparing microbial testing materials for classroom teaching. As a result, it’s much easier to include hands-on experiments in the classroom.

### Current 3M authorized providers of this program include:

- Flinn Scientific Inc.  
Batavia, IL  
800-452-1261
- Carolina Biological Supply Company  
Burlington, NC  
800-334-5551
- Connecticut Valley Biological Supply  
Southampton, MA  
800-628-7748

## 3M Microbiology University Program

*Complimentary Petrifilm plates for food science programs in the United States.*

University food science programs in the U.S. are eligible for free Petrifilm plates for non-commercial research and development purposes in classroom studies. Higher education programs may receive samples of Petrifilm Aerobic, *E. coli*/Coliform, and Yeast and Mold Count Plates. In addition, food science programs may request supporting technical literature and video program to help demonstrate the use of Petrifilm plates. This program has been in place for over 10 years and has successfully provided support to microbiology curriculums across the country.

## Updates

### Petrifilm Plate Approvals Update

In May of 1999, the AOAC INTERNATIONAL Official Methods Board adopted the modifications to AOAC® Official Methods<sup>SM</sup> Approval 996.02 (Coliform Count in Dairy Products, High-Sensitivity Dry Rehydratable Film Method).

In July of 1999, AOAC INTERNATIONAL accepted the Pre-Collaborative Study report for Rapid Enumeration of Total Coliforms in Foods, Dry Rehydratable Film Method.

### Petrifilm Plate Shelf Life is Extended

Based on recent real-time test results, the shelf life of 3M™ Petrifilm™ Rapid *S. aureus* Count Plates has now been extended to 18 months. This shelf life extension is in keeping with the rest of the Petrifilm plate family. All newly produced packages of the Petrifilm Rapid *S. aureus* Count plates reflect this change.

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## 3M™ Petrifilm™ Plates Cut Labor Hours Nearly in Half

Camille Riggins, quality assurance manager at Cumberland's busy lab, took a moment to comment on the efficiency and consistency of Petrifilm plates. "3M's product saves time and space, making it possible for us to test hundreds of samples every day. The product's consistent performance also allows us to maintain the tight tolerances necessary for the specialty-packaged, long-shelf-life foods we produce. We simply couldn't do the job as fast or as well with conventional agar plates. Petrifilm plates make our lives here a lot easier."

"3M's multi-plant study is a compilation of results from individual plant studies conducted since 1994," explained Kevin Habas, market development supervisor, 3M Microbiology Products. The study results reflect actual, not estimated, results of using Petrifilm plates in 274 plants of varying sizes in the food and beverage industry. In addition to revealing labor savings, the study also documented total cost savings of 18.6 percent per test using Petrifilm plates vs. the agar method. "Over the years, we've helped individual managers realize the impact Petrifilm plates have had on their operations by conducting an impact analysis,

which determines the real savings on cost and labor in each particular plant operation."

Quality assurance managers like Riggins know from experience that Petrifilm plates save time. So most are not surprised when they see the actual data on labor efficiency. On average, 3M's study showed Petrifilm plates saved employees 18 hours per 40-hour work week. With the time saved, many Petrifilm plate customers have initiated increased process monitoring, quality control and value-added testing functions that further impact their company's bottom line. "For example, some of our customers have put in place additional line sampling programs or customer-complaint monitoring programs that they previously didn't have time for with available staff," Habas said.

"Our customized approach to analyzing labor and cost savings is significant, because each laboratory is somewhat different in the number of tests conducted, methods used and specific costs incurred," Habas continued. "Compiling each plant's individual results into a 274-plant study is a way for us to realize an overall trend in time savings while preserving data privacy for individual customers."

For more information about the multi-plant study, click on the "Manufacturers and Processors" section of

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## Log On: 3M Launches Microbiology Web Site

said Steve Bonfig, marketing manager, 3M Microbiology. "In this case, it means offering access to information to help them anytime, anywhere. Providing important information 24 hours a day, seven days a week is a start. Our goal is to continue to find and develop Internet applications that make our customers' lives easier and strengthens our connections with them."

With 3M Microbiology customers located around the world, the web site provides access to services on a multinational level. Technical service contacts are given for all regions of the world as well as listings and hot links on where to buy Petrifilm plates and other related products. Programs unique to individual regions, such as the Canada Scholarship Program, are featured as well.

To find out how the new 3M Microbiology web site can help you with your quality assurance programs log on today to

[www.3M.com/microbiology](http://www.3M.com/microbiology)



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