

Pathogen Environmental Monitoring and Control and Display Night—A Success!!



Paul Hall of Kraft Foods and current president of International Association of Food Protection spoke at the Speakers Evening in February at the Best Western Abercorn Inn and delivered an excellent presenta-



Paul Hall, IAFP President and Terry Peters, BCFPA President.

tion on "The Role of Environmental Monitoring for Controlling Pathogens in Food Manufacturing Plants". Hall's conclusions:

- In process monitoring is the most effective means to measure the success of a microbiological control program.
- Monitoring verifies that sanitation, GMP's, and prerequisite programs are working as they should be.
- Environmental monitoring is an essential tool for measuring effectiveness of microbiological control

programs and as a root cause investigational tool.

- It is essential that proper test methods and sampling procedures be validated in order to ensure the lowest error rates possible.
- Proper follow-up actions must be documented to ensure that the process is back within control.

To review his entire talk, go to www.bcfpa.net and click on the Events page.

The event was attended by 88 representatives of the local food, analytical, pest control, personnel and sanitation industries as well as a number of members of academia and government.



Displays surrounded the room allowing participants an excellent opportunity to network and learn more about food protection and its tools.

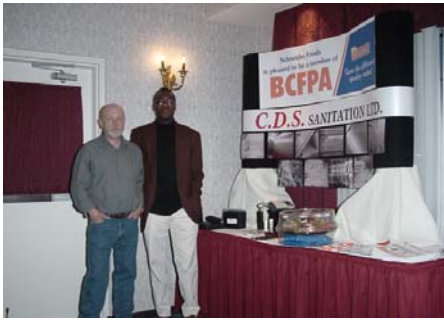
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Special points of interest:

- *Biosecurity increases as our awareness and vulnerabilities increase.*
- *Canada's first and only Canadian trade publication has arrived!*
- *Increased incidence of food poisoning in oysters.*

Many thanks to the displayers who participated in the recent BCFPA Speakers Evening and made the event terrific !!



Ernst Schoeller (C.D.S. Sanitation Ltd.) & Michael Mensah-Wilson (JM Schneider Inc.) in front of their shared display.



Shella Virina and Franco Petra
PCO Services Inc.



Kelly Geere
IG MicroMed Environmental Ltd.



Rene Andersen
Caltech Tech Services



Dave Pinnell and Darlene Kreuger
VWR International



Nick Beatty & Kathy Drommerhausen
BioControl Systems, Inc.



Quang Tran and Melinda Ghaffari
Fletcher's Fine Foods



Karin Kijek
Kelly Scientific Resources



BC Food Protection Association & International Association for Food Protection

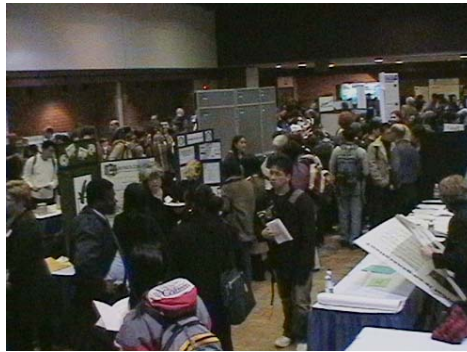


To download these and many other food safety icons go to the International Association for Food Protection website: www.foodprotection.org

BCFPA—Student Affiliate

The BCFPA SPDG (Student Professional Development Group) is the student arm of BCFPA.

Michelle Michaud was this year's group chair and was instrumental in getting this group organized and active. Michelle will be graduating this year and the BCFPA wish her well in her new adventures! The group has a new interim committee, with Kim Willing as the Student Coordinator, Stephanie Chiu Secretary, and Monique Miles, Events Coordinator.



UBC Student Career Fair—BCFPA display and Executive, Terry Peters, Lance Hill, Lorraine McIntyre and Michelle Michaud were there!

The group has enjoyed the past school term, having had the opportunity to meet at UBC campus,

and have a tour of the Bread Garden production facility in Vancouver.

The school term is coming to an end this April. They look forward to more student activities and learning opportunities coming up for the SPDG in September.

If you are a student and would like to know more about joining the BCFPA student group, see the BCFPA website (www.bcfpa.net) for more information, upcoming events, and contacting the student committee.

Student Group Bread Garden Tour—March 18, 2004

The Bread Garden Production Facility supplies food to several accounts, including themselves, Bread Garden Bakery Cafes. The facility, located in Vancouver, is 7 years old and was designed to provide the Bread Garden Cafes with products of consistent quality. As the cafes grew in popularity, they became unable to meet the increased demand for their products in a relatively small space. The cafes still do their own baking daily, but receive the "raw materials" from the production facility (e.g. muffin batters, cookie doughs, etc.).

David Eto, manager of the facility, led us through the tour and showed us what goes on in each area (making muffins, cinnamon buns, soups, sandwiches, etc.). In a few areas we also had staff

members explain in more detail what they do, as each person has their own area of expertise within the facility. Throughout



David Eto, Manager of the Bread Garden explains the baking process to the UBC-Student BCFPA affiliate.

the tour Mr. Eto also explained various aspects of the food safe practices that are followed at the facility, such as their HACCP (Hazard Analysis Critical

Control Point) plan.

We were fortunate enough to be invited to join the staff in celebrating Persian New Year, an example of just one of the multicultural events that they make an effort to observe. The staff also participates in daily group exercises. It was apparent that not only the work of the staff is valued, but their happiness and well being also.

The tour was very informative, interesting and enjoyable. Thank you again to Mr. Eto and the rest of the staff for sharing part of your workday with us!

Written by:

*Monique Miles
BCFPA Student Representative*

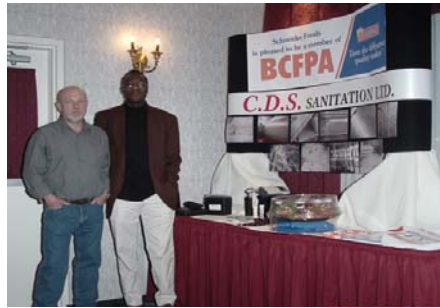
Sustaining Member Profile—C.D.S Sanitation Ltd.

C.D.S. Sanitation Ltd. was founded in 1985.

Our company specializes in the clean up and sanitizing of food plants including all production equipment and production rooms. Our clean up crews are custom tailored to satisfy the needs of a specific plant.

With our cleanup crews we supply clean up equipment and chemicals, or monitor the usage of your chemicals.

We schedule and monitor the



Ernst Schoeller (C.D.S. Sanitation Ltd.) & Michael Mensah-Wilson (JM Schneiders Inc.) - their shared display.

clean up of areas or equipment not cleaned on a regular or daily basis.

We also develop SSOPs and Sanitation Manuals.

C.D.S. conducts all clean up in accordance with the HACCP regulations and completes the necessary paperwork.

Our service is guaranteed, and is confirmed by Swab Tests, ATP Tests and Air Sampling.

For further information please contact Ernst Schoeller at: 604-657-1557 or email cdssanltd@shaw.ca

Biosecurity - Everyone Has A Role to Play

Heightened biosecurity is increasingly demanded each time our industry's vulnerability is demonstrated in an outbreak. Past examples include the Mosaic Virus in tomatoes, Sudden Oak Death in Camellias, Foot and Mouth in the U.K., BSE in Europe and N. American and most recently, Avian Flu in poultry in the Fraser Valley.

Anyone working directly or indirectly with the agricultural industry must be knowledgeable in livestock and plant disease prevention procedures when duties connect them to the farm.

Risk and Plan Evaluation

Biosecurity in agriculture includes the development of Standard Operating Procedures (SOPs) that:

- Work practically on a national, provincial, regional, and farm level to keep disease agents out where they did not already exist.
- Prevent the spread of disease that may exist within an operation, region or province.

Involve everyone who interfaces with the farm. The list is long and can include: owner, manager, farm workers, family, delivery personnel, veterinarian, pickers, equipment repair crews, bankers, haulers, processors, distributors, farmers markets, etc. - anyone visiting farms.

Long term maintenance, improvement of current measures and a tightening of external controls are critical in any suc-

cessful plan. To insure success a simple review of current practices should include:

- Review of current health status and biosecurity plan of own and source operations.
- Review of isolation methods of new animals or plants and the returning of animals (e.g. from exhibitions) and equipment (e.g. tractors, haulers) to the farm.
- Review of traffic patterns of people and equipment traveling between groups within the farm and off the farm (e.g.: How are they kept separated? Can farm traffic be separated from off-farm traffic?).
- Review of cleaning and dis-

Biosecurity - Everyone Has A Role to Play (cont'd)

infection procedures — are they effective in reducing pathogen levels?

Farm - Human Contact

Low-risk contact would include those from urban areas or those who have had no other farm related contact. Although these visitors may present very little risk of introducing disease, some precautions should still be considered as they may be innocent vectors when they visit other operations. Ask visitors to:

- Wear clean outerwear and footwear. Disposable plastic boots (or clean rubber boots and coveralls which remain at the farm) may be an option.
- Use disinfectant-filled foot baths or mats.
- Prevent visitors from entering livestock or plant areas.
- Prevent visitors from bringing food articles onto the farm.
- Provide a separate collection area for used boots and coveralls.
- Ask guests to wash their hands before leaving.

Moderate-risk would include those people who routinely visit farms, but who have little or no contact with animals or plant areas: e.g. sales representatives, delivery drivers, and maintenance workers. The

minimum SOP they should be expected to observe is to utilize the same precautions as stated earlier and in addition:

- Keep vehicles clean and free of visible manure on the tires and wheel wells.
- Insure all off-farm vehicles are kept away from areas and driveways used by farm vehicles.
- Always use a fresh pair of clean coveralls for each farm visited. Coveralls worn on the farm should be removed and placed in a designated "dirty" container before re-entering the vehicle.
- Clean and disinfect dirty boots.

High-risk includes those who have direct contact with livestock or plant areas: e.g. processing, picking, and pruning crews, inseminators, veterinarians, haulers, hoof trimmers, equipment maintenance crews, and family/neighbors who have operations themselves. In addition to the precautions listed earlier, other recommendations might include:

- Keep separate the clean and dirty compartments in the vehicle.
- Use rubber floor mats in driver and passenger areas in the vehicle for easier cleaning.

- Insure vehicle storage areas are easily disinfected— line trunk with single, solid rubber or heavy plastic liner.
- Keep hauling units (trucks and trailers) clean and dry, and preferably disinfected, before arrival on the farm. If possible, repeat again after unloading.
- Clean and disinfect equipment that had direct contact (e.g. clipboards, plant pruners, hoof trimmers, halters).
- Wear disposable or cleanable gloves whenever in direct contact with plants or animals.

The information in this article is intended to raise awareness and stimulate evaluation of current biosecurity practices. Risk may vary considerably and be influenced by the specific disease agent, the extent of the contact, the time elapsed since the last contact, and the preventive measures used with that commodity.

Everyone that interacts with the farm community should consider evaluating and updating their biosecurity plan with a livestock or plant health specialist. Agriculture is everyone's "bread and butter" and as such, everyone has an important role to play in preventing disease.

Written by:

*Annette Moore,
Quality First in Agriculture Inc.*

Presidents Corner

I am pleased to report to you that our success continues to grow. Following the lead of our IAFP president Paul Hall, we are devoting some effort in providing support to our student members and to encourage more of them to join. We are hoping to reinforce an awareness for food safety beyond their teachings and to carry it beyond the classroom.

The BCFPA displayed at the University of British Columbia AgSci/Science Career Fair last February 3rd. We enjoyed talking about our organization with the students and we also signed up other students.

Future BCFPA Student Professional Development Group activities need your help, please participate if asked. These people are our future. To learn more see the student page on our website.

Our website (www.bcfpa.net) is now fully functional with quite a photo album and record of our Speakers Evening

presentations and other events. Netscape users will be glad to hear their access problems to the site are now gone. It was quite a puzzle for us for a long time and I would like to thank Lance Hill for his enduring work on resolving this.

Our Speakers Evening in February was an unqualified success. We hosted our first event that included displays from industry and our sustaining members. Our featured speakers were Paul Hall of Kraft Foods and current president of IAFP, as well as, Kathy Drommerhausen of BioControl Systems and Michelle Michaud of our Student Development Group. We received a lot of positive feedback about the event. We hope to be able to have this kind of evening again in the fall. I would like to thank everyone who was a part of that evening and helped to make it a success.

It is already starting to look like summer and thoughts are

turning to outdoor barbeques and picnics. We are very fortunate here in BC for the mild climate that we have. Again I would like to advise everyone to store their foods at proper temperatures and to thoroughly cook their burgers etc. on the barbeque.

For those of you who are sustaining members, we were pleased to present your membership plaques at our Speakers Evening. You are probably aware now of our three categories of sustaining memberships (gold, silver and bronze). We have developed a system that acknowledges your years of membership and for this year, indicates your level of membership. If you have not yet received your plaque or stickers, please contact me and I will see that they are sent to you. Thank you Everyone for your continued support.

*Terry Peters,
BCFPA President*

**Terry Peters, BCFPA
President**

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Burnaby, BC
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*To provide a forum to exchange
information on protecting the
food supply.*

BCFPA Executive—Share Your Ideas!

Have an idea, or thought about future events and activities by BCFPA? Or maybe you'd like to get involved? Or, maybe you'd like to contribute an article or idea for the next newsletter. If so contact anyone on the executive!

Terry Peters, President – Ph: (604) 666-1080

Annette Moore, Vice President and Newsletter Editor - Ph: (604) 859-5962

Lorraine McIntyre, Treasurer – Ph: (604) 660-6079

Ernst Schoeller, Secretary – Ph: (604) 657-1557

Christine Hein, Special Events – Ph: (604) 513-6401

Michael Mensah-Wilson – Ph: (604) 421-4500

Lance Hill, Membership Coordinator Ph: (604) 666-7534

Upcoming Meetings / Training

- **On-Farm Auditor Training** — SGS Canada Inc is offering training in this area in 3 locations: 1) May 17 - 21 in Longueuil, QC; 2) June 14-18th in Halifax, NS; 3) June 21 to 25th in Saskatoon, SK. To register contact: Victor Muliyl, HACCP Specialist/Technical Program Manager, SGS Canada Inc. Ph: (905) 676-9595, email: vic-tor.muliyl@sgs.com For more info: <http://www.sgs.ca/serviceSolutions/haccp/onFarmAuditor.html> .
- Considering a career in On-Farm Food Safety/Quality Auditing or Training but want to know more about this new field? University College of the Fraser Valley will be offering an 18 hour introductory course spread over 5 nights and 1 half day this fall. Watch their website and flyers for course announcement and details.

New Canadian Food Safety Magazine

Food Safety in Canada magazine, is the first and only Canadian trade publication dedicated exclusively to the Canadian food industry. This quarterly publication will be distributed in Canada's key markets, as well as at industry trade shows, conferences and seminars.

The publication will address the top-of-mind food safety, quality assurance and food security issues of concern to stakeholders in all food industry sectors including foodservice, hospitality, food processing, warehousing and distribution, retail, packaging and equipment manufacturers, healthcare, government regulators and inspectors, microbiology laboratories, training groups and on-farm.

"The mission of Food Safety In Canada is to heighten industry awareness and impart knowledge in order to encourage compliance with the various aspects of food safety, and thereby enhance the safety and quality of the nation's food supply, from farm to fork." says Shirley McClune, president of KلاسAct Communications Ltd. and publisher.

Dr. Doug Powell, founder and scientific director of the Food Safety Network and associate professor in the Department of Plant Agriculture at the University of Guelph, in Ontario, comments, "Consumers

and retailers, and for that matter everyone in the food industry from farm-to-fork, are recipients and purveyors of food safety information, and are seeking food safety wisdom. Given ever-changing consumer demands, new technologies such as ready-to-eat foods, and better surveillance tools to detect the microorganisms responsible for outbreaks of foodborne illness - farmers, distributors, retailers, foodservice businesses and consumers all require a relevant and timely source."

The magazine's premier issue profiles Conrad Leung who directs the Asian Culinary Arts Department at Vancouver Community College,

where he teaches North America's only full-time professional Chinese cooking program in English and Cantonese, which includes the Foodsafe Level 1 course that he translated for his curriculum and for British Columbia's Ministry of Health. Dr. Doug Powell talks about the need for food safety wisdom, while John Nolan, a certified food safety specialist and NFPA

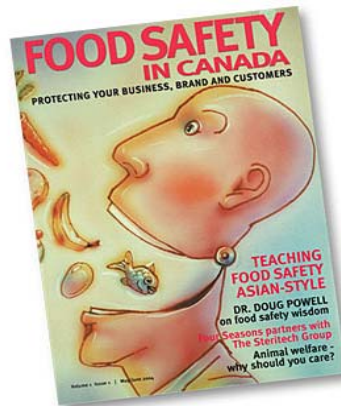
auditor, explains the benefits of animal welfare. A case study features the elite Four Seasons Hotel and its first class food safety program in partnership with The Steritech Group. Readers will also learn valuable tactics to help prevent cross contamination, in addition to the benefits of implementing a HACCP system.

As a marketing vehicle, the magazine is a unique medium that enables advertisers to promote food safety products, services and solutions to a targeted audience of decision-makers and buyers in the Canadian food industry. Their website: www.foodsafetyincanada.com, will provide additional exposure for advertisers.

Food Safety in Canada's vision is to be the foremost provider of food safety information and education for the Canadian food industry - the cornerstone of the nation's economy.

Readers are invited to forward comments, questions and suggestions to the editor. Those interested in becoming a member of their advisory board may contact the publisher.

Source: *FSNET April 7, 04*



The Importance of Proper Oyster Preparation!

Since early January 2004 there has been an increase in the number of food poisoning incidents directly related to oyster consumption reported to the public health laboratory in British Columbia (BC Centre for Disease Control) from health units all over the province. People reporting illnesses have consumed either raw or partially cooked oysters from a variety of sources; raw oysters on the shell in restaurants or battered and pan-fried in salads and meals; purchased fresh from markets in the shell or shucked in tubs, and self-harvested from the beach. Symptoms of the illness include some or all of vomiting, diarrhea, fever, nausea and fatigue. Symptoms typically began between 12 and 60 hours after eating (oysters) and persisted for 1 to 3 days. Several ill oyster eaters reported severe dehydration from the excessive vomiting and profuse diarrhea with a few requiring emergency room visits.

Testing of patient samples (feces or emesis) revealed that Norovirus, commonly associated with cruise ship illness, was the culprit. Over 100 incidents have been reported to BCCDC, with the incidents involving anywhere from a single person to banquets of over 100. Norovirus is a small + RNA strand gastroenteritis virus believed to be responsible for over 23 million illnesses (67%) a year in the

US. Norovirus is in the family Caliciviridae, within this family there are other types of virus which infect other animals (feline calicivirus for instance); humans are the only known host and reservoir for Group 1 and Group II Norovirus.

Usually when a large number of people become ill from consuming oysters it can be traced back to a specific incident or harvest area. This is usually



Self harvested oysters from the beach.

related to a sewage breach or an infected food handler or contaminated water supply. This outbreak has proved challenging - several harvest areas, different brands of oysters and different distributors have been implicated in the reported illnesses - no clear pattern has emerged. However, all inspections revealed good handling practices by harvesters, distributors and restaurant food-handlers.

The CFIA and BCCDC have been

jointly investigating the cause and possible sources of contamination of the oysters. Inspections and trace-back of harvested oysters have not implicated a specific harvest area, supplier or distributor. All inspections, from the grower to the food handler failed to turn up any potential sources of contamination. This led to the question; "were oysters really the cause?"

During the course of this outbreak a complaint received by a Public Health Inspector involved a couple attending a restaurant on Valentine's Day. Follow-up of this complaint revealed that this particular restaurant didn't usually serve oysters, but as a special event had an "aphrodisiac" menu over Valentine's week-end. The owner of the restaurant was very co-operative and allowed the BCCDC to conduct a cohort analysis.

This involved phoning people on the reservation list and from credit card statements to conduct a detailed survey. Patrons of the restaurant that week-end were asked what they ate on the menu, whether they became ill, where they worked (high-risk occupation) and other risk factors. The results of this study revealed raw oyster consumption as the only statistically significant risk factor to patron illness.

Another challenge to the oyster illness investigation is the

The Importance of Proper Oyster Preparation! (Cont'd)

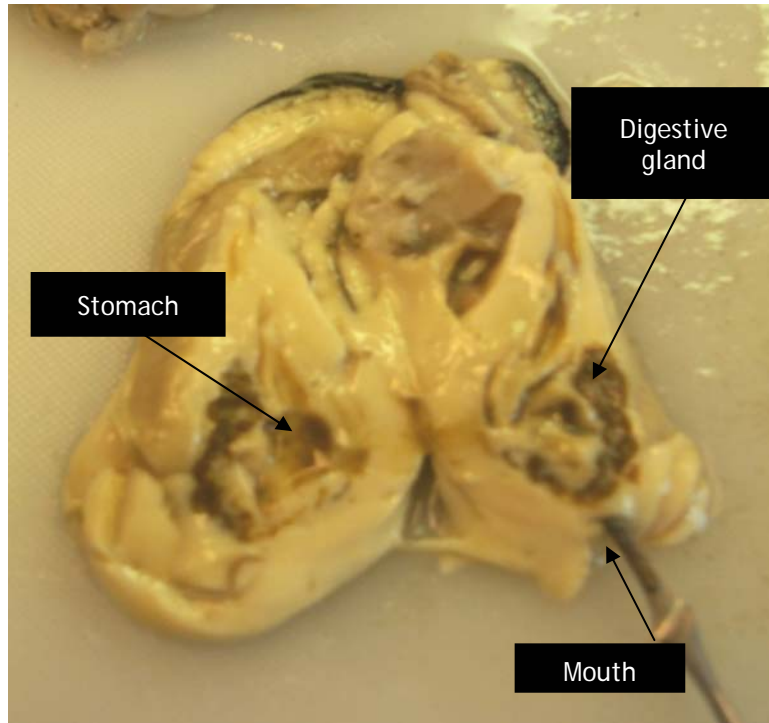
ability to detect Norovirus in the oyster. So far neither the CFIA nor BCCDC labs have had any success detecting the virus in the oyster specimens. Oysters do not become infected with the virus, they are just the carriers or vehicles for infection.

Oysters are filter feeders and can filter large quantities of water. If there are any contaminants in the water these can be picked up in the oysters stomach, digestive glands and intestines. Although Norovirus was never found in the oysters, sequencing data on the positive patient samples revealed some interesting clues.

Half of all the ill people had the same Norovirus sequence pattern, which seems to indicate that there might be a common source of infection - but what?

Some theories proposed are the affects of the shipping industry (dumping), resident marine life (sea lions may carry the virus although they don't become infected by the same strains as humans) and general sewage contamination in the ocean. A retrospective investigation of the cruise ship outbreaks

showed no sequence match to the current infective strain, which doesn't lend itself to the first theory. On the other hand, in one particular incident, a party of eight people ate some self-harvested oysters



Cross-section of an oyster.

from the beach, and several of them became very ill 24 to 30 hours after consuming the oysters. The Norovirus detected in each person had a different sequence pattern - meaning there was no common source.

In this case it's unlikely that a sick person contaminated the oysters (otherwise all the sequence patterns would be the same). This suggests the likelihood of community sewage contamination in the ocean (humans are the only known

reservoir or source for Norovirus).

What does this mean to the public? Most warnings about oysters are seasonal (*Vibrio parahaemolyticus* is a harmful pathogen often detected in shellfish in the summer months). However, this outbreak demonstrates that eating raw or partially cooked oysters ANYTIME OF YEAR is a risk factor for illness.

Cooked oysters Rockefeller on the shell, a nice spicy oyster gumbo or smoked oysters are a better choice. Oysters should be cooked to an internal temperature of at least 60°C (140°F).

If you do experience illness after eating oysters or any kind of shellfish please call your local Public Health office.

An excellent link for more information:
www.cfsan.fda.gov/~dms/vv-toc.html

Written by:
Lorraine McIntyre
Gastroenteritis Outbreak Coordinator, Supervisor, Food Poisoning, Environmental Services, Laboratory Services, BC Centre for Disease Control

BCFPA's Sustaining Members



Results. Right now.

Is your company or organization missing? Please contact the BCFPA Membership Coordinator at members@bcfpa.net to inquire about becoming a Sustaining Member