

SAFE FOOD NEWS

Volume IX, No. 2/3

Winter/Spring 2005

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This newsletter can be found on the SafeFood web site.

Check it out at:

<http://www.colostate.edu/Orgs/safefood/>

Colorado State University and U.S. Department of Agriculture cooperating. Cooperative Extension programs are available to all without discrimination.

FOOD SAFETY ISSUES FOR CANCER AND ORGAN TRANSPLANT PATIENTS

Cancer and organ transplant patients are included on the list of immune compromised persons at highest risk of foodborne illness. Cancer and bone marrow patients are especially susceptible to infection during periods of “neutropenia,” resulting either from the underlying condition or the medical treatment used. Organ transplant patients are at high risk for infection during medical treatment and at continuing risk for the rest of their lives due to drug treatment used to prevent rejection of the transplanted organ.

The clinical marker for immune suppression is termed neutropenia, defined as a deficiency of circulating lymphocytes or neutrophils. Neutropenia results during radiation therapy or chemotherapy when beneficial white blood cells are destroyed along with targeted cancer cells.

Cancer and Bone Marrow Transplant

There are three main medical treatments used for cancer: radiation therapy, chemotherapy and bone marrow transplants. All result in some level of neutropenia, created as the cytotoxic agent attacks rapidly dividing cells. Whenever neutrophil counts drop below 500 cells/microliter, the patient is considered at high risk for opportunistic infection. Patients receiving intermittent cycles of chemotherapy will have 3-5 days of neutropenia post therapy. Patients receiving myeloablative therapies in preparation of a bone marrow transplant or to treat leukemia will experience periods of neutropenia lasting 23-27 days after treatment. Persons receiving bone marrow transplants are most susceptible to opportunistic infections during the 2-4 weeks before and following transplantation. Most patients will be prescribed a low microbial diet during this period to minimize the chance



of infection from foodborne pathogens. When the neutrophil count returns to 500 cells/ μ l, the risk of opportunistic infection has begun to subside. Immunosuppressive drugs are not necessary to maintain bone marrow transplants. Therefore, if all other co-morbidities are resolved and if there are no other lifespan or pharmacological reasons for immune suppression, most cancer and bone marrow patients fully recover their immune function and risk of opportunistic infection returns to that of a healthy individual within 6 to 18 months following treatment. Particular concern for food handling behavior also returns to the usual precautions used by all individuals.

Solid Organ Transplants

The absolute neutrophil count is also used to monitor immune suppression in persons with organ transplants. Opportunistic infection can be caused by any type of microorganism from either the environment or food. The greatest susceptibility to infection occurs during the first month following the transplant.

To help prevent rejection of the transplanted organ, most patients need to take drugs like cyclosporine, azathioprine, or mycophenolate for the rest of their lives. Drug therapy suppresses immune function to a “low normal” level, enough to prevent rejection but still provide some protection against opportunistic infection. Transplant patients are most susceptible to infections during the first 6 months post transplantation due to higher doses of immunosuppressive drugs. They will remain at risk of opportunistic infections, at least to some degree, for as long as they are on the medical treatment. For this reason, organ transplant patients need to be cautious about food handling practices for life since foodborne pathogens could be the cause of an opportunistic infection.

Pathogens

Pathogens of particular concern to cancer and transplant patients include Norovirus, *Shigella* spp., *E. coli* 0157, *Salmonella* spp., *Campylobacter jejuni*, *Yersinia enterocolitica*, *Toxoplasma gondii*, *Vibrio* spp., and *Listeria monocytogenes*. Severe foodborne illnesses or consequences resulting from the illnesses may occur in cancer and transplant patients if care is not taken in food selection and handling.

The majority of cases of *Listeria monocytogenes* occur in individuals with suppressed immune systems.

Compared with the general population, cancer patients with solid tumors are 66 to 229 times more susceptible to becoming infected with *Listeria monocytogenes*, and individuals with blood-borne cancers have a 1,364 times greater risk. Transplant patients are at the top of the list with a risk that is over 2,500 times greater than a healthy adult. This high relative risk justifies the guidance that cancer and transplant patients should avoid the following risky foods, especially during times of greatest immune suppression:

- Raw or undercooked meat, poultry, eggs, fish, and shellfish
- Unpasteurized milk and chilled fruit juices
- Raw sprouts (like alfalfa)
- Soft cheeses made with raw milk
- Hot dogs and luncheon meats that have not been reheated to steaming hot
- Refrigerated pates and meat spreads
- Refrigerated smoked fish and pre-cooked seafood, such as shrimp and crab

Education Materials

Food safety materials designed specifically for persons with cancer or organ transplant can be found on the Colorado State University SafeFood website. Go to <http://www.colostate.edu/orgs/safefood> and click on Food Safety for High Risk Groups.

Sources:

- 1) Online continuing education course: *Food Safety for High Risk Populations*; Pilot Oct. 2004. Available at <http://www.hec.osu.edu/highriskfoodsafety/>. Presenter: Hillers, V. Professor, Extension Specialist. Washington State University.
- 2) Kendall P, Medeiros LC, Hillers V, Chen G, DiMascola S. Food handling behaviors of special importance for the pregnant, young, elderly and immune compromised. *J Amer Diet Assoc.* 2003;103:1646-1649.



FOOD SAFETY HIGHLIGHTED IN 2005 DIETARY GUIDELINES

The 2005 *Dietary Guidelines for Americans* are out. As a joint effort by the U.S. Department of Health and Human Services (HHS) and the U.S. Department of Agriculture (USDA), the guidelines are reviewed and updated every 5 years to offer the most current, scientifically-based, information to the American public in the area of nutrition and health. The latest version of the Dietary Guidelines features food safety as one of the nine focal areas.

The key food safety recommendations to **avoid microbial foodborne illness** are:

- ▶ Clean hands, food contact surfaces, and fruits and vegetables. Meat and poultry should not be washed or rinsed.
- ▶ Separate raw, cooked, and ready-to-eat foods while shopping, preparing, or storing foods.
- ▶ Cook foods to a safe temperature to kill microorganisms.
- ▶ Chill (refrigerate) perishable food promptly and defrost foods properly.
- ▶ Avoid raw (unpasteurized) milk or any products made from unpasteurized milk, raw or partially cooked eggs or foods containing raw eggs, raw or undercooked meat and poultry, unpasteurized juices, and raw sprouts.

There are additional recommendations for special population groups, including infants and young children, pregnant women, older adults, and those who are immunocompromised:

- ▶ Do not eat raw or undercooked fish or shellfish.
- ▶ Only eat deli meats and frankfurters that have been reheated to steaming hot.

Talking Points

The recommendations support the four key messages currently emphasized by the USDA's Partnership in Food Safety Education: "Clean, Separate, Cook, Chill," with the additional message to "avoid certain potentially unsafe foods." The first two recommendations address personal hygiene and prevention of cross contamination. Consumers should be instructed to "wash with soap and water all food contact surfaces before and after food preparation" and

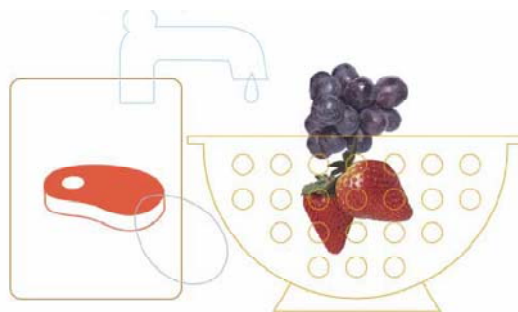
to "wash hands using soap and running warm water for at least 20 seconds, then dry with a clean towel." Additionally, all fruits and vegetables should be "rinsed under running water prior to eating." Contrary to popular belief, washing and rinsing raw meat and poultry can greatly increase risk of cross contamination and is unnecessary, since cooking destroys any bacteria on the meat.

To assure that foods are cooked adequately, consumers are advised to "use a food thermometer to make sure foods are cooked to safe internal temperatures." Leftovers should "be reheated to the proper internal temperature of 165°F." The "chill" message emphasizes the need to chill all perishable food promptly and store at 41°F or below. Foods should be defrosted in the refrigerator, under cool running water, or in the microwave, and not on the counter.

Lastly, the message to avoid unsafe foods is of particular importance to those individuals at greatest risk of foodborne disease, including pregnant women, infants, older adults and persons with medical conditions that affect immune function. The foods listed to avoid are those that can harbor pathogenic microorganisms and have been implicated in foodborne outbreaks.

To view the Dietary Guidelines for Americans 2005 fact sheet, go to <http://www.healthierus.gov/dietaryguidelines/>. The Food Safety section of the 2005 Dietary Guidelines Advisory Committee report can be found at <http://www.health.gov/dietaryguidelines/dga2005/document/pdf/Chapter10.pdf>

Source:
2005 Dietary Guidelines Advisory Committee Report: Food Safety.
Available at: <http://www.healthierus.gov/dietaryguidelines/>



A CLOSER LOOK AT PRODUCE WASHES

Fresh and fresh-cut fruits and vegetables, traditionally considered “low risk,” are becoming more of a food safety concern. Produce items associated with foodborne outbreaks in recent years have included berries, cabbage,



cantaloupe, lettuce, raw sprouts, tomatoes and watermelon. Fortunately, consumers are getting the message that it is important to wash fruits and vegetables before eating. The term “wash”, however, can have very different meanings even among the experts in the field.

What NOT to Use

Although fruit and vegetable processing plants routinely use chlorine as an effective antimicrobial agent in their produce washing operations, the amounts used and timing are carefully controlled to ensure safety. For consumers, use of detergent or laundry bleach for cleansing fruits and vegetables is highly risky. Fruits and vegetables are porous and can absorb the soap or bleach, which are not approved or labeled by the Foods and Drug Administration for use on foods. Therefore, these products should NEVER be recommended for home use in cleaning foods.

Running Water – the Reliable Standard

The U.S. Department of Agriculture recommends that consumers simply “rinse fresh fruits and vegetables well under running water prior to eating.” More specifically, the University of Minnesota provides these tips on washing fresh produce:

- Before working with any foods, wash hands with soap and water. Also, make sure preparation areas are sanitary.
- Under clean, running water, rub fruits and vegetables briskly with your hands to remove dirt and surface microorganisms.
- Wash produce just before serving - not before storing, as washing will cause produce to spoil faster.
- Produce with a firm skin or hard rind like carrots, potatoes, melons or squash may be scrubbed with a vegetable brush and water.
- Discard the outer leaves of leafy vegetables such as lettuce and cabbage before washing.
- Always wash squash and melons, even if you don't eat the rind or skin because when cut, dirt or bacteria

that is on the outer surface can be transferred to the inner flesh.

- DO NOT wash produce with detergent or bleach solutions. Fruits and vegetables are porous and can absorb the detergent or bleach, which is not intended for use on foods and consuming them on fruits and vegetables have the potential to make you sick.

Commercial Produce Washes

Several studies have looked at the effectiveness of produce washes. In most cases the produce washes have been found to be “equally effective or “slightly better” than tap or distilled water in removing microbes and pesticide residues. For example, in a study conducted at University of California-Riverside, one group of produce was washed with plain tap water, the second rinsed with both water and produce wash, and the third was not rinsed at all. The combined treatment of produce wash followed by water rinse reduced surface pesticide residues by 6% more than the water alone method, a difference too minor in the researcher’s opinion to justify the purchase price of a produce wash.

Some produce washes recommend soaking the fruits and vegetables in the wash solution. This can be problematic if the water becomes contaminated. Also, prolonged soaking of fruits and vegetables in wash solutions can damage produce quality and contribute to nutrient losses. Because rinsing in tap water alone is still highly effective, most researchers agree that it comes down to personal preference as to whether produce washes are worth the purchase price.

Vinegar and Lemon Juice Treatments

A few studies have evaluated the effectiveness of vinegar and lemon juice (weak organic acids) as anti-microbial and anti-browning agents. In controlled studies, the best results in microbial reduction have been achieved when use of organic acids were combined with other treatments, such as a water rinse and/or agitation. In one such study, apples were spot inoculated with *Salmonella enterica*, wetted with 1 teaspoon of water or vinegar (5% acetic acid), rubbed for 5 or 30 seconds, rinsed with water, and dried with a paper towel. Dipping in vinegar, followed by rubbing for 5 seconds, rinsing with running water, and drying with a paper towel resulted in a reduction of 5.2 to 6.2 log CFU per apple, which was significantly ($p < 0.05$) larger than reductions achieved with water washing alone (3.1 log CFU per apple).



Another study evaluated the effectiveness of household products, including lemon juice and vinegar, in reducing levels of *E. coli* on iceberg lettuce. *E. coli* reductions were 2.1 log CFU/g when inoculated lettuce samples were exposed to 13% lemon juice and 2.6 logs CFU/g when samples were exposed to 13% lemon juice and agitation (10 min.). The authors concluded that 13% lemon juice was significantly ($P < 0.05$) more effective when combined with agitation.

Cold Storage

An additional factor in controlling bacterial populations on fresh produce is cold temperature storage. Studies have continued to show that cold storage slows the growth of pathogenic bacteria. For example, *Salmonella* Montevideo grew on tomatoes stored at 20 and 30°C but not at 10°C (Zhaung et al., 1995). *Listeria monocytogenes* grew well on fresh-cut cabbage and onions stored at 10°C but not at 4 °C (Farber et al., 1998) and *Escherichia coli* O157:H7 grew on fresh-cut melon at 12-25°C but not at 5°C (41°F) (Del Rosario and Beuchat, 1995).

There is a need to continue exploring new methods to remove, inhibit and /or destroy pathogens on fresh and minimally processed fruits and vegetables. Consumer recommendations are likely to change as new treatments for produce washing are evaluated. The American Dietetic Association's Home Food Safety website offers general tips in *Keeping Produce Safe*, available at: http://www.homefoodsafety.org/pages/tips/tips/produce_safe.jsp.

Sources:

- 1) Food Safety and Inspection Service (FSIS); United States Department of Agriculture. Food Safety Features. Does Washing Food Promote Food Safety? July 1999. www.fsis.usda.gov/OA/pubs/washing.htm
- 2) Produce Washes Effective at Removing Pathogens. Center for Food Safety. University of Georgia. <http://www.griffin.peachnet.edu/cfs/hottopics/producewashes.html>
- 3) Brackett, R.E. 1992. Shelf stability and safety of fresh produce as influenced by sanitation and disinfection. *J Food Prot.* 55: 808-814.
- 4) DeRoeve, C. 1998. Microbiological safety evaluations and recommendations on fresh produce. *Food Control.* 9:321-347.
- 5) Parnell, T.L. and L.J. Harris. 2003. Reducing *Salmonella* on apples with wash practices commonly used by consumers. *J Food Prot.* 66 (5): 741-747.
- 6) Zhuang, R.Y., L.R. Beuchat and F.J. Angulo. 1995. Fate of *Salmonella* Montevideo on and in raw tomatoes as affected by temperature and treatment with chlorine. *Appl. Environ. Microbiol.* 61:2127-2131.
- 7) Del Rosario, B.A. and L.R. Beuchat. 1995. Survival and growth of enterohemorrhagic *Escheria coli* O157:H7 in cantaloupe and watermelon. *J Food Prot.* 58:105-107.
- 8) Farber, J.M., et al. 1998. Changes in populations of *Listeria monocytogenes* inoculated on packaged fresh-cut vegetables. *J Food Prot.* 61: 192-195.

RINSING MEAT: FOOD SAFETY HELP OR HINDRANCE?

Historically, we equate washing with cleanliness. Why, then is one of the recommendations in the 2005 Dietary Guidelines for Americans that consumers **not** wash meat and poultry before cooking? The reason lies in minimizing the spread of bacteria. Bacteria present on the surface of meat or poultry are easily destroyed by cooking, but bacteria spread to other surfaces and foods during the washing process may not receive the needed heat treatment.



According to USDA's Meat and Poultry hotline, bacteria from the rinsed meat is easily spread to the sink, faucet, your hands, dish clothes, and anything you touch or that comes in contact with the raw meat. Further contamination may occur if other food items such as fresh vegetables or fruits are then placed in the sink. While the bacteria on the meat will be destroyed during cooking, that on the salad ingredients will likely be served to the dinner guests.

The USDA also does not recommend washing eggs before storing or using them. Washing is a routine part of commercial egg processing and eggs do not need to be washed again. Fresh laid eggs have a natural coating called "bloom," which helps prevent bacteria from permeating the shell. Although removed by washing, egg processors restore this protection with a light coating of edible mineral oil. At home, extra handling of eggs, such as washing, could increase the risk of cross contamination, especially if the shell becomes cracked.

Fruits and vegetables **do** need to be thoroughly washed before eating, especially if served without further cooking. An information sheet by the Food Safety Inspection Service (FSIS) taking aim to educate consumers about these misconceptions can be viewed at: <http://www.fsis.usda.gov/OA/pubs/washing.htm>.

Sources:

- 1) Does Washing Food Promote Food Safety? USDA/Food Safety and Inspection Service (FSIS). July 1999. Available at: <http://www.fsis.usda.gov/OA/pubs/washing.htm>.
- 2) 2005 Dietary Guidelines Advisory Committee Report: Food Safety. Available at: http://www.health.gov/dietaryguidelines/dga2005/report/PDF/D9_FoodSafety.pdf.

KIDS IN THE KITCHEN

It's not unusual these days for school-age kids to take an active role in preparing foods for themselves or other family members. Whether it's making cookies from scratch or heating soup in the microwave, it's important for both kids and their parents to be aware of safety concerns. Before letting kids have the run of the kitchen, it's a good idea to plan a "food safety workshop" to show them some basic tips. For starters, the USDA has developed the following quiz for parents and kids to take together:



Quiz: True or False-

1. Put backpacks on the floor, not on the counter.
2. Washing your hands with warm water and soap washes bacteria down the drain.
3. You need to wash fruits and vegetables under cold running water before eating.
4. Cooked foods should not be put on the same plate that held raw meat or poultry (unless the plate has been thoroughly washed).
5. Lunch meat or deli meat does not need to be refrigerated until the package is opened.
6. Don't leave leftovers on the counter for more than 2 hours.
7. Always wash your hands after touching raw meat or poultry.
8. Eating homemade cookie dough is not safe because it may contain raw eggs.

(Answers: 1, 2, 3, 4 - True. 5 - False. 6, 7, 8 - True.)

Children must be old enough to understand the science behind these kitchen warnings. For example, learning how bacteria grow and cause foodborne illness can help them understand WHY food needs to be put back in the refrigerator as soon as possible. Additionally, children can learn to use a food thermometer to check for safety and doneness. In order to safely use a microwave oven, children must be able to read and understand directions. Important tips for using a microwave include:

- Reheat hot dogs until they are hot and steaming. Pierce hot dogs with a fork before putting them into the microwave oven to keep them from exploding.
- Foods and liquids heat unevenly in the microwave, so stir or rotate food midway through cooking. If you don't, you'll have cold spots where harmful bacteria can survive.
- Cover a dish of food for microwaving with a lid or plastic wrap and wrap loose to let steam escape. The moist heat will help destroy harmful bacteria.
- To prevent burns, carefully remove food from the microwave oven. Use potholders and uncover foods away from your face so steam can escape.
- Do not use plastic containers such as margarine tubs or other one-time use containers in the microwave. They can warp or melt, possibly causing harmful chemicals to get in the food.
- Do not use metal or aluminum foil containers in the microwave. They can get too hot and burn. Use only glass and other containers labeled "made for microwave use."
- Throw away leftovers (and any perishable food) that stays out longer than two hours - or one hour if it's over 90 °F. When in doubt, throw it out!

Kid-friendly messages such as "Clean, Separate, Cook and Chill" offered by FightBac[®] can be posted on the refrigerator. These and other education materials can be found at www.fsis.usda.gov under the Partnership for Food Safety Education.

Source:

Home Alone? After School Snacks and Food Safety USDA Quiz for Parents and Kids. By Susan Conley and Steven Cohen. USDA Food Safety and Inspection Service-News Release. Sept. 7, 2004. Available at:

http://www.fsis.usda.gov/News_&_Events/NR_090704_01/index.asp

IN THE NEWS

GOOD NEWS FOR GROUND BEEF

Ground beef may be getting safer. This is not to say that consumers should let their guard down when it comes to safe handling and cooking of meat, but there is encouraging news. USDA's Food Safety and Inspection Service (FSIS) reports a steady decline over the past several years in the percentage of ground beef samplings that test positive for *E. coli* O157:H7. According to FSIS, of the 8,010 samples collected and analyzed in 2004, only 0.17 percent tested positive for *E. coli* O157:H7, down from 0.30 in 2003 (a 43.3% decrease) and 0.86 in 2000.

Incidences of food recalls as well as illnesses related to *E. coli* O157:H7 have also declined. In its April 2004 report, the Centers for Disease Control and Prevention reported a 36% reduction in illnesses from *E. coli* O157:H7 in 2003 compared to 2002. FSIS reported only 6 recalls related to *E. coli* in 2004 compared to 12 in 2003 and 21 in 2002.

FSIS credits these dramatic reductions on focused regulatory and industry efforts aimed at reducing pathogens in America's meat, poultry and egg products. Beef plants are utilizing new technologies and following carefully reviewed Hazard Analysis and Critical Control Point (HACCP) safety plans. Last year FSIS launched new training initiatives for inspectors and compliance officers to make sure its directives are being enforced. Additionally, the agency offers workshops and technical expertise to small plant operators, all designed to strengthen *E. coli* O157:H7 prevention procedures.

While all this is good news, it doesn't mean rare hamburgers are free of pathogens. On the contrary, food safety educators should continue to advise consumers to cook ground beef to 160°F and remember to wash hands, utensils and contact surfaces well after contact with raw meat.

Source:

FSIS Ground Beef Sampling Shows Substantial *E. coli* O157:H7 Decline in 2004. News Release. Feb. 28, 2005. Go to:
http://www.fsis.usda.gov/News_&_Events/NR_022805_01/index.asp.

COMING EVENTS

ROCKY MOUNTAIN FOOD SAFETY CONFERENCE

MAY 24 - 25, 2005

arvadacenter
for the Arts
and Humanities

6901 Wadsworth Blvd.
Arvada, Colorado 80003

The 33rd Annual Rocky Mountain Food Safety Conference promises to be an exciting one with cutting edge information for food safety professionals! The 2-day agenda will cover the following topics:

- ▲ Microbial Food Safety of Fresh Fruits & Vegetables—A Growing Concern
- ▲ Getting Produce to Market: Postharvest Food Safety
- ▲ Seal of Commitment: A partnership between Summit County and the Colorado Restaurant Association
- ▲ FDA's Foodborne Illness Risk Factor
- ▲ Keeping Kitchen Environments Safe in School Cafeterias
- ▲ Norovirus and Infection Control: An Update
- ▲ Hand Contact and Ready-To-Eat Foods
- ▲ *Listeria Monocytogenes* in RTE Foods: Prevalence & Risks
- ▲ Emergency Preparedness Planning
- ▲ Food Safety Issues with Home Food Drying
- ▲ Food Safety Trends
- ▲ Organic Foods: Safety Issues and Challenges

The early-bird rate is \$135 (by April 22). The regular professional rate is \$150, with a student rate of \$60 being offered. On-site registration will be \$165. **Be sure to see the registration brochure with this newsletter for more details.**



**LILLIAN FOUNTAIN SMITH CONFERENCE
JUNE 9 - 10, 2005
MARRIOTT HOTEL
FORT COLLINS, COLORADO**

Save the dates for this year's Lillian Fountain Smith Conference for Nutrition Educators to be held on June 9 – 10, 2005, at the Fort Collins Marriott Hotel, located at 350 E. Horsetooth Road. This year, a special pre-conference workshop is being offered – StrongWomen Training Workshop:

**NEW This Year:
June 8, 2005
StrongWomen
Training Workshop**

LIFTING WOMEN TO BETTER HEALTH



The StrongWomen program is an evidence-based strength-training program developed by the staff of the [John Hancock Center for Physical Activity and Nutrition \(JHCPAN\)](#) at the Friedman School of Nutrition Sciences and Policy, Tufts University. The primary objective of the StrongWomen Program is to help communities nationwide implement safe and effective strength training programs for midlife and older women.

In addition to the *StrongWomen* workshop, the following sessions will be offered at this year's conference:

- Session 1** Maximizing Health through Strong Bones, Strong Muscles
- Session 2** Strengthening Communities through Local Foods
- Session 3** Clarifying the Omega-3 Fatty Acid Controversy

For more information or to register, go to www.cahs.colostate.edu/fshn/lfsc.

SERVSAFE® TRAININGS

Denver Metro Region

Manager level ServSafe® trainings are offered monthly in the Denver metro area through the Colorado Restaurant Association. Cost: members - \$130; non-members - \$170. Please call 303-830-2972 for a complete schedule of dates and locations.

Eastern Region

Contact Joy Akey (970) 332-4151

<i>Date</i>	<i>Location</i>	<i>Intended Audience</i>	<i>Fee</i>
04/05/05 1:30 – 6p	Brush, CO	Food Handler Trng	\$25 (Due by Mar 29)
09/14/05 8 – 5:30p	Sterling, CO	Mgrs Certification Trng	\$85 (after 8/10, \$100)
11/08/05 1:30 – 6p	Brush, CO	Food Handler Trng	\$25 (Due by Nov 1)

Western Region

<i>Date</i>	<i>Location</i>	<i>Intended Audience</i>	<i>Fee</i>
05/19/05 8 – 5:30p	Eagle, CO	Mgrs Certification Trng	\$100

Contact Glenda Wentworth (970) 328-8630

06/14/05 8 – 5:30p	Delta, CO	Mgrs Certification Trng	\$120 (Pre-registration required)
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Contact Norraine Harvey (970) 244-1834

ONGOING FOOD HANDLER TRAININGS

The *Food Safety Works* safe food handler training is being offered on a monthly basis by Larimer County Cooperative Extension, in conjunction with the Larimer County Health Department. The cost is \$25 per person for the 3-hour training. To register, please contact Edi McSherry at (970) 498-6015.



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RESOURCES

EGG FOOD SAFETY

Now that Spring is here, a useful fact sheet for consumers that highlights safety tips for eggs is *Welcome to Spring... A Great Time for Eggs!* developed by USDA's



Partnership for Food Safety Education. To download the PDF file, go to :

http://www.fightbac.org/spring_fact.cfm.

For other questions or concerns about eggs, contact the American Egg Board at www.aeb.org or the Egg Nutrition Center at www.enc-online.org.

FOOD SAFETY FACT SHEETS

Featured this month are the following food safety consumer Fact Sheets available from USDA/FSIS:

1. ***Protect Your Baby and Yourself from Listeriosis*** is a 1-pager for women of child bearing age covering special food safety guidelines during pregnancy.
2. ***Safe Handling of Take Out Foods*** is a colorful, consumer-friendly, brochure that provides food safety tips to fit our busy lifestyles.
3. ***2005 USDA Food Safety Planner***
Throughout this planner (calendar format), you'll find food safety information, ideas, and topics you can use to help you get the word out.

To download PDF versions of these materials, go to: http://www.fsis.usda.gov/Fact_Sheets/Seasonal_Food_Safety_Fact_Sheets/index.asp and click on the individual fact sheets of interest.



FOOD SAFETY MOBILE COMING TO DENVER

The USDA Food Mobile will be in Denver on May 7 and 8, 2005, for the Cinco de Mayo Festival. County Extension agents will be partnering with the Colorado Department of Public Health and Environment to provide food safety education activities during the two day event. For more information on the food mobile, go to:



http://www.fsis.usda.gov/food_safety_education/food_safety_mobile/index.asp. If interested in volunteering with this event, please contact Raenette Hamann with Denver County Health Department at (720)865-5374 or by email, Raenette.Hamann@ci.denver.co.us.

"ASK KAREN"

USDA's Food Safety Inspection Service (FSIS) now offers a new automated response system featuring "Karen," a virtual representative, to answer consumer food safety questions any time around the clock. Through an extensive database of food safety information, consumers can obtain information about prevention of foodborne illness, as well as the safe handling, preparation, and storage of meat, poultry, and egg products. To ask Karen, go to: http://www.fsis.usda.gov/Food_Safety_Education/Ask_Karen/index.asp#Question



This newsletter was prepared by Food Science & Human Nutrition Extension Specialists:

Mary Schroeder, M.S., R.D.

Pat Kendall, Ph.D., R.D.

Direct comments about the newsletter to Mary Schroeder at:

Colorado State University
Dept. of Food Science & Human Nutrition - 1571
Fort Collins, CO 80523-1571
Phone: (970) 491-7334 FAX: (970) 491-7252
E-mail: mary.schroeder@colostate.edu

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33rd annual
food safety conference

2005 Rocky Mountain Food Safety Conference and Golf Tournament

GOLF TOURNAMENT
to benefit the Lydia P. Cole Scholarship Fund
May 23
West Woods Golf Club
6655 Quaker St.
Arvada, Colorado

CONFERENCE
May 24 and 25
Arvada Center for the Arts and Humanities
6901 Wadsworth Blvd.
Arvada, Colorado

Agenda tuesday may 24

- 8:00am registration
- 8:45 welcome
- 9:00 *Microbial Food Safety of Fresh Fruits and Vegetables—A Growing Concern*
Dr. Trevor Suslow
- 10:30 break
- 11:00 *Getting Produce to Market: Postharvest Food Safety*
Frank Kelsey
- 12:00pm lunch
- 1:00 *Seal of Commitment: A partnership between Summit County and the Colorado Restaurant Association*
Jim Rada and Mary Mino
- 1:45 *FDA's Foodborne Illness Risk Factor Study*
Mario Seminara, Jr.
- 2:30 break
- 3:00 *Keeping Kitchen Environments Safe in School Cafeterias*
Sean Leer
- 4:15 closing remarks

Agenda wednesday may 25

- 8:00am welcome
- 8:15 *Norovirus and Infection Control: An Update*
Alicia Cronquist
- 9:15 *Hand Contact and Ready-To-Eat Foods*
Jeff Lawrence
- 9:45 break and RMFSC Scholarship Award
- 10:15 *Listeria Monocytogenes in RTE Foods: Prevalence and Risks*
Shawn Eblen
- 11:15 *Emergency Preparedness Planning*
speaker to be announced
- 12:15pm lunch
- 1:15 *Food Safety Issues with Home Food Drying*
Dr. Patricia DiPersio
- 2:00 *Food Safety Trends*
Mike Holmes
- 3:00 *Organic Foods: Safety Issues and Challenges*
Dr. Harshavardhan Thippareddi
- 4:00 closing remarks

save on
early-bird
registration

Who should attend this year's conference

- environmental health professionals
- employees of food related businesses
- regulators
- food safety educators
- food safety managers/lab personnel
- registered dietitians
- school food service directors
- food service managers

Golf Tournament and Silent Auction

TO BENEFIT THE LYDIA P. COLE MEMORIAL SCHOLARSHIP FUND, ESTABLISHED IN 1999 IN REMEMBRANCE OF LYDIA COLE, AND TO ASSIST ENVIRONMENTAL HEALTH STUDENTS WITH THEIR EDUCATION.

On May 23, grab your clubs and spikes and head to the beautiful West Woods Golf Club for the Rocky Mountain Food Safety Conference Golf Tournament. Lots of food, fun and prizes. Contact Devin Koontz at 303.236.3020 for details and to request an entry form for your foursome.

During the conference on May 24 and 25, we'll have a silent auction where you can bid on great prizes donated by conference committee members and local vendors.

Your participation in these events will help us continue Lydia's devotion to education and commitment to food safety embodied in her career.

About our speakers

speakers listed in order of appearance

Trevor Suslow, PhD

Professor; Extension Post-Harvest Specialist
Department of Vegetable Crops
University of California
Davis, CA

Frank Kelsey

Manager
Western Colorado Research Center
Colorado State University
Grand Junction, CO

Jim Rada

Environmental Health Manager
Summit County Public Health Department
Frisco, CO

Mary Mino

President
Colorado Restaurant Association Education Fund
Denver, CO

Mario Seminara

Regional Food Specialist
Southwest Region, Food and Drug Administration
Denver, CO

Sean Leer

SFS Pac and PortionPac Chemical Corporation
Chicago, IL

Alicia Cronquist, RN, MPH

Foodborne and Enteric Disease Coordinator
Colorado Department of Public Health and Environment
Denver, CO

Jeff Lawrence

Food Protection Program Manager
Colorado Department of Public Health and Environment
Denver, CO

Shawn Eblen, MS

Microbiologist
Food and Drug Administration
College Park, MA

Patricia DiPersio, PhD, RD

Department of Food Science & Human Nutrition
Colorado State University
Fort Collins, CO

Mike Holmes

Zone Manager South Metro
U.S. Foodservice
Denver, CO

Harshavardhan Thippareddi, PhD

Assistant Professor
Department of Food Science and Technology
University of Nebraska
Lincoln, NE

save on
early-bird
registration

Sign up now!

name _____
title _____
organization _____
address _____
city _____ state _____ zip _____
phone _____
fax _____
e-mail _____

SPECIAL EARLY-BIRD RATE — MAIL BY APRIL 22
• two-days \$135

REGISTRATION FEES (after April 22)

• professional rate	two-days \$150	one-day \$90
• student	two-days \$60	one-day \$30
• on-site reg. fee	two-days \$165	one-day \$125

• includes continental breakfast, lunch and breaks each day
• if you plan to attend one day only, please indicate which day
 May 24 May 25

ALL REGISTRATIONS MUST BE MAILED BY MAY 13

GROUP RATES — MAIL BY APRIL 22
• register 5 people from your organization, a 6th person is FREE

Yes, please reserve vegetarian meals for me

PAYMENT
mail your check and this registration form to:
Rocky Mountain Food Safety Conference
P.O. Box 281205
Lakewood, CO 80228
*make checks payable to Rocky Mountain Food Safety Conference
RMFSC does not take credit cards*

conference space is limited!

*Because the Rocky Mountain Food Safety Conference is a non-profit organization,
please respect our no refund policy.*

If you have questions about the conference
please call **Carla Opp** at 303.271.5765

To register for the May 23 golf tournament,
please contact **Devin Koontz** at 303.236.3020

Area hotels



IF YOU NEED OVERNIGHT ACCOMMODATIONS DURING THE CONFERENCE, THE FOLLOWING HOTELS ARE WITHIN A 20-MINUTE DRIVING DISTANCE OF THE ARVADA CENTER.

- La Quinta Inn — 303.425.9099**
8701 Turnpike Drive
Westminster
- La Quinta Inn—Promenade — 303.438.5800**
10179 Church Ranch Way
Westminster
- Doubletree Hotel — 303.427.4000**
8773 Yates Drive
Westminster
- Denver Marriott West — 303.279.9100**
1717 Denver West Parkway
Golden
- Ramada Inn — 303.423.4000**
I-70 and Kipling Street
Wheat Ridge

- Interstate Inn-17 — 303.423.0800**
4735 Kipling Street
Wheat Ridge
- Motel 6 Wheat Ridge West — 303.467.3172**
10300 I-70 Frontage Road
Wheat Ridge
- Quality Inn West — 303.467.2400**
12100 W. 44th Avenue
Wheat Ridge
- Holiday Inn Express — 303.428.3333**
8500 Turnpike Drive
Westminster
- Hampton Inn — 303.427.0700**
5030 W. 88th Place
Westminster



Arvada Center for the Arts and Humanities
6901 Wadsworth Blvd.
Arvada, Colorado 80003
720.898.7200