

## **Resources for the Development of HACCP Systems in School Foodservice**

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### **HACCP RESOURCES**

Research and information about Hazard Analysis and Critical Control Point (HACCP) systems has been plentiful since the introduction of the concept by the Pillsbury Corporation in the 1960s. The theory and application of HACCP in food processing has evolved gradually since being introduced. In 1992, the National Advisory Committee on Microbiological Criteria for Foods published a document that identified a format for HACCP process analysis based on the seven HACCP principles (NACMCF, 1992). Since then, this document has been adapted by the U.S. Department of Agriculture (USDA), the Food and Drug Administration (FDA), and internationally through the Codex Alimentarius Commission for use in the food industry.

Since initial applications of HACCP have been mandated in the United States for certain types of food processing operations, information and educational materials have been developed principally for these groups. To date, a majority of the information and resources have focused on the education and training needs of food processors. Research from the scientific community has helped foodservice operators learn the value of HACCP in their operations. Besides manuals and training programs, articles in the scientific literature also have been crucial to the development of science-based, food safety practices in retail operations. HACCP applications in retail foodservice operations including restaurants, schools, hospitals, and other operations have not been as prevalent. There are many reasons to explain the lack of retail HACCP programs, but two primary factors are that many operators do not have a sufficient understanding about HACCP programs and that very few regulatory agencies mandate HACCP programs for foodservice operations.

Information about retail HACCP started appearing in the refereed literature as early as the late 1970s though literature in the 1990s provided a more complete overview of retail HACCP systems. Due to heightened concerns about food safety related to hospital patients, some of the first work related to retail HACCP in foodservice was conducted in healthcare settings (Bobeng & David, 1977; Bobeng & David, 1978a; Bobeng & David, 1978b). Other authors later reflected on the development of HACCP systems for other types of foodservice operations, such as restaurants, but also took a more thorough approach with new scientific information (Bryan, 1990; Synder, 1990; Synder, 1991; Sperber, 1991). More recently, research has been done relating to the development of food safety and HACCP programs in school foodservice operations (Giampaoli, Sneed, Clusky, & Koenig, 2001a; Giampaoli, Sneed, Clusky, & Koenig, 2001b; Henroid & Sneed, 2003; Hwang, Almanza, & Nelson, 2001; Kim & Shanklin, 1999; Youn & Sneed, 2003; Youn & Sneed, 2002). This research and subsequent work has formed the basis for retail HACCP programs.

Despite the presence of information related to retail HACCP systems in the literature, a majority of the education and training resources have focused on HACCP applications in other settings besides schools, such as hospitals. Foodservice operators must judge the quality of the HACCP materials available and make determinations about which resources are applicable in the retail environment. The purpose of this article is to provide a comprehensive listing of resources and articles published in refereed journal and trade magazines related to HACCP to date. The listing is provided as a representative sample of the available research and training materials for use in the development of HACCP programs in schools. A sampling of Web sites with information for the development of a foodservice HACCP program also is provided. Selected books and journal articles have been highlighted that might be particularly useful for the development of school HACCP systems. Research done specifically in schools or that is particularly applicable to school foodservice programs has been highlighted.

In addition to work specifically related to HACCP, there also are articles related to prerequisite programs, including good manufacturing practices, which address operational conditions and provide the foundation for the HACCP system. These programs include areas such as supplier control, temperature monitoring, personal hygiene standards, and pest control, and often are addressed through sanitation standard operating procedures. These programs are essential precursors to a valid HACCP program and should be the starting point for the development of any HACCP system.

### GENERAL REFERENCES

Bobeng, B.J., & David, B.D. (1977). HACCP models for quality control of entree production in foodservice systems. *Journal of Food Protection*, 40, 632-638.

Bobeng, B.J., & David, B.D. (1978a). HACCP models for quality control of entree production in hospital foodservice systems: I. Development of Hazard Analysis Critical Control Point models. *Journal of the American Dietetic Association*, 73, 524-529.

Bobeng, B.J., & David, B.D. (1978b). HACCP models for quality controls of entrée production in hospital foodservice systems: II. Quality assessment of beef loaves utilizing HACCP models. *Journal of the American Dietetic Association*, 73, 530-535.

Bryan, F.L. (1990). Hazard Analysis Critical Control Point (HACCP) system for retail food and restaurant operations. *Journal of Food Protection*, 53, 978-983.

National Advisory Committee on Microbiological Criteria for Foods. (1992). Hazard Analysis and Critical Control Point system. *International Journal of Microbiology*, 16, 1-23.

Snyder, O.P. (1990). Food safety 2000: Applying HACCP for food safety assurance in the 21st century. *Dairy, Food and Environmental Sanitation*, 10, 197-204.

Snyder, O.P. (1991). HACCP in the retail food industry. *Dairy, Food and Environmental Sanitation*, 11, 73-81.

## FOOD SAFETY AND HACCP REFERENCES

### Selected Books and Manuals

Food Service Associates. (2000). *The complete HACCP manual for institutional and food service operations*. (2nd ed.) Dunkirk, NY: Food Service Associates.

International Commission on Microbiological Specifications of Foods. (1988). *Application of the Hazard Analysis Critical Control Point (HACCP) system to ensure microbiological safety and quality*. Boston: Blackwell Scientific.

Linton, R., & Almanza, B. (1996). (Selected Publication) *Hazard Analysis Critical Control Points (HACCP) for foodservice and food retail operations*. Purdue Cooperative Extension Publication.

National Restaurant Association Educational Foundation. (1998). *A practical approach to HACCP coursebook*. Chicago, IL: Author.

Puckett, R.P. & Norton, L.C. (2001). (Selected Publication) *HACCP the future challenge: Practical application for the foodservice administrator*. (4th ed.) Missouri City, TX: The Norton Group.

### Selected Journal Articles

Bryan, F.L. (1990). Hazard analysis critical control point (HACCP) system for retail food and restaurant operations. *Journal of Food Protection*, 53, 978-983.

Bryan, F.L. (1999). Hazard analysis critical control point approach to food safety: Past, present, and future. *Journal of Environmental Health*, 61 (8), 9-15.

Connors, P., Bednar, C., Imhran, C., & Czajka-Narins, D. (1999). Evaluation of milk handling practices in public elementary schools results in HACCP model development. *Journal of Child Nutrition and Management*, 23, 101-105.

Giampaoli, J., Sneed, J., Clusky, M., & Koenig, H.F. (2002). School foodservice directors' attitudes and perceived challenges to implementing food safety and HACCP programs. *Journal of Child Nutrition and Management*, 26. Retrieved April 28, 2003, from <http://docs.schoolnutrition.org/newsroom/jcnm/02spring/giampaoli1/>

Giampaoli, J., Cluskey, M., & Sneed, J. (2002). Developing a practical audit for assessing employee food handling practices. *Journal of Child Nutrition and Management*, 26. Retrieved April 28, 2003 from <http://docs.schoolnutrition.org/newsroom/jcnm/02spring/giampaoli2/>

Hwang, J.H., Almanza, B.A., & Nelson, D.C. (2001). Factors influencing school foodservice directors/managers' plan to implement a Hazard Analysis Critical Control Point (HACCP) program. *Journal of Child Nutrition and Management*, 25, 24-29.

Kassa, H., Harrington, B., Bisesi, M., & Khuder, S. (2001). Comparisons of microbiological evaluations of selected kitchen areas with visual inspections for preventing potential risk of foodborne outbreaks in food service operations. *Journal of Food Protection*, 64, 509-513.

Kim, T., & Shanklin, C.W. (1999). Time and temperature analysis of a school lunch meal prepared in a community with conventional versus cook-chill systems. *Foodservice Research International*, 11, 237-249.

McSwane, D., & Linton, R. (2000). Issues and concerns in HACCP development and implementation for retail food operations. *Journal of Environmental Health*, 62(6) 15-18.

Setiabudhi, M., Theis, M., & Norback, J. (1997). Integrating hazard analysis critical control points (HACCP) and sanitation for verifiable food safety. *Journal of the American Dietetic Association*, 97, 889-892.

Snyder, Jr., O.P. (1986). Microbiological quality assurance in foodservice operations. *Food Technology*, 40(7), 122-130.

Snyder, O.P. (1991). HACCP in the retail food industry. *Dairy, Food and Environmental Sanitation*, 11, 73-81.

Sperber, W.H., Stevensen, K.E., Bernard, D.T., Deibel, K.E., Moberg, L.J., Hontz, L.R., & Scott, V.N. (1998). The role of prerequisite programs in managing a HACCP system. *Dairy, Food and Environmental Sanitation*, 18, 418-423.

Youn, S., & Sneed, J. (2002). Training and perceived barriers to implementing food safety practices in school foodservice. *The Journal of Child Nutrition and Management*, 26. Retrieved April 28, 2003, from <http://docs.schoolnutrition.org/newsroom/jcnm/02fall/youn/>

Youn, S., & Sneed, J. (2003). Implementation of HACCP and prerequisite programs in school foodservice. *Journal of the American Dietetic Association*, 103, 55-60.

### **Other Related Books and Manuals**

Corlett, Jr., D.A. (1998). *HACCP User's Manual*. Gaithersburg, Md: Aspen Publishers.

Farber, J.M., & Todd, E.C.D. (2000). *Safe handling of foods*. New York: Marcel Dekker.

Food and Drug Administration. (1999). *Cook it safely: Consumer education planning guide*. Washington, DC: U.S. Department of Agriculture.

Food and Drug Administration. (2000). *Report of the FDA retail food program database of foodborne illness risk factors*. Washington, DC: U.S. Department of Agriculture.

Food Marketing Institute. (1989). *A program to ensure food safety in the supermarket the hazard analysis critical control point system*. Washington, DC: Food Marketing Institute.

Garden-Robinson, J. (1996). *Implementing HACCP in foodservice establishments: A training manual*. Fargo, ND: North Dakota Cooperative Extension.

Ghazala, S. (1998). *Sous vide and cook-chill processing for the food industry*. Gaithersburg, Md: Aspen Publishers.

Guerrier, Y., Kipps, M., Lockwood, A., & Sheppard, J. (1992). *Perceptions of hygiene and quality in food service operations*. In C.P. Cooper & A. Lockwood (Eds.), *Progress in tourism, recreation and hospitality management* (Vol. 4, pp. 182-194). London: Belhaven Press.

Guzewich, J.J. (1987). *Practical procedures for using the hazard analysis critical control point (HACCP) approach in food service establishments by industry and regulatory agencies*. Chelsea, MI: Lewis Publishers, Inc.

Hemminger, J.M. (2000). *Food safety: A guide to what you really need to know*. Ames, Iowa: Iowa State University Press.

Hui, Y.H., & Yiu H. (2001). *Foodborne disease handbook*. New York: Marcel Dekker.

Jones, J.M. (1992). *Food safety*. St. Paul, MN: Eagan Press.

Lachney, A. (1997). *The HACCP cookbook and manual*. Eatonville, WA: Nutrition Development Systems.

LaVella, B.W., & Bostic, J.L. (1999). *HACCP for food service professionals*. (3rd ed.) St. Louis, MO: LaVella Food Specialists.

Loken, J.K. (1995). *The HACCP food safety manual*. New York: John Wiley & Sons, Inc.

McSwane, D.Z., Rue, N., Linton, R., & Williams, A.G. (2002). *Essentials of food safety & sanitation*. (3rd ed.) Upper Saddle River, NJ: Pearson Education.

Mortimore, S., & Wallace, C. (1998). *HACCP: A practical approach*. (2nd ed.) Gaithersburg, MD: Aspen Publishers.

National Restaurant Association Educational Foundation. (2002). *ServSafe Coursebook*. Chicago, IL: Author.

Pierson, M.D., & Corlett, D.A. (1992). *HACCP principles and applications*. New York: Van Nostrand Reinhold.

Price, R.J., Tom, P.D., & Stevenson, K.E. (1993). *Ensuring food safety...The HACCP way: An introduction to HACCP & a resource guide for retail deli managers*. University of California at Davis Cooperative Extension Publication. Retrieved May 3, 2003, from <http://nsgd.gso.uri.edu/cuimr/cuimrh93001.pdf>

Redman, N. (2000). *Food Safety: A reference handbook*. Santa Barbara, Calif: ABC-CLIO.

Satin, M. (1999). *Food Alert: The ultimate sourcebook for food safety*. New York: Checkmark Books.

Stevenson, K.E., & Bernard, D.T. (Eds.). (1995). *Establishing Hazard Analysis Critical Control Point Programs: A workshop manual*. Washington, DC: The Food Processors Institute.

U.S. Department of Agriculture, Food and Nutrition Service, with the National Food Service Management Institute. (2002). *HACCP for Child Nutrition Programs: Building on the Basics*. University, MS: National Food Service Management Institute.

Technology TEAM, Inc. (1999). *Your self-study guide to understanding how to develop a HACCP plan*. Alexandria, VA: Author.

Unnevehr, L.J. (2000). *The economics of HACCP: Costs and benefits*. St. Paul, MN: Eagan Press.

U.S. Food Safety and Inspection Service. (1999). *Generic HACCP model for fully cooked, not shelf stable meat and poultry products*. Washington, DC: U.S. Department of Agriculture.

U.S. Food Safety and Inspection Service. (1999). *HACCP and your workplace*. Washington, DC: U.S. Department of Agriculture.

U.S. Food Safety and Inspection Service. (1999). *What is HACCP*. Washington, DC: U.S. Department of Agriculture.

World Health Organization. (2000). *Food safety for nutritionists and other health professionals*. Washington, DC: Author.

### **SCHOOL HACCP AND FOOD SAFETY JOURNAL ARTICLES**

Ali, A.A., & Spencer, N.J. (1996). Hazard Analysis and Critical Control Point evaluation of school food programs in Bahrain. *Journal of Food Protection*, 59, 282-286.

Blakelee, K.M., & Penner, K.P. (1999). A case study of a school foodservice cook-chill operation to develop a hazard analysis critical control point program. *Dairy, Food and Environmental Sanitation*, 19, 257-267.

Brown, N.E., McKinley, M.M., Aryan, K.L., & Hoetzeler, B.L. (1982). Conditions, procedures, and practices affecting safety of food in 10 school food service systems with satellites. *School Food Service Research Review*, 6(1), 36-44.

Gill, K.F. (2000). Instituting a HACCP program for school districts in a large city. *Journal of Environmental Health*, 62 (7), 21-30.

### **Other Foodservice HACCP Journal Articles**

Almanza, B.A., & Ghiselli, R. (1998). Implementation and cost of HACCP in a grill type operation. *Journal of Foodservice Systems*, 10, 107-124.

Bauman, H. (1994). The origin of the HACCP system and subsequent evolution. *Food Sciences and Technology Today*, 8(5), 66-73.

Belo, P., Giampaoli, J., & McProud, L. (1996). Attitudes and knowledge of food safety among Santa Clara County, California restaurant operators. *Journal of Food Service Systems*, 9, 117-129.

Bobeng, B.J., & David, B.D. (1977). HACCP models for quality control of entree production in foodservice systems. *Journal of Food Protection*, 40, 632-638.

Bobeng, B.J., & David, B.D. (1978a). HACCP models for quality control of entree production in hospital foodservice systems: I. Development of hazard analysis critical control point models. *Journal of the American Dietetic Association*, 73, 524-529.

Bobeng, B.J., & David, B.D. (1978b). HACCP models for quality control of entree production in hospital foodservice systems: II. Quality assessment of beef loaves utilizing HACCP models. *Journal of the American Dietetic Association*, 73, 530-535.

Bryan, F.L. (2002). Where we are in retail food safety, how we got to where we are, and how do we get there? *Journal of Environmental Health*, 65(2), 29-36.

Bryan, F.L. (1996). Another decision-tree approach for identification of critical control points. *Journal of Food Protection*, 59, 1242-1247.

Bryan, F.L. (1995). Hazard analyses of street foods and considerations for food safety. *Dairy, Food and Environmental Sanitation*, 15, 64-69.

Bryan, F.L. (1994). HACCP: Present status and future in contribution to food safety. *Dairy, Food and Environmental Sanitation*, 14, 650-655.

Bryan, F.L. (1990). Hazard analysis critical control point (HACCP) concept. *Dairy, Food and Environmental Sanitation*, 10, 416-418.

Bryan, F.L., & Lyon, J.B. (1984). Critical control points of hospital foodservice operations. *Journal of Food Protection*, 47, 950-963.

Bryan, F. (1981). Hazard analysis of food service operations. *Food Technology*, 35(2), 78-87.

Cichy, R.F. (1982). HACCP as a quality assurance tool in a commissary food-service system. *International Journal of Hospitality Management*, 1(2), 103-106.

Cohen, E., Cukierman, G.E., & Schwartz, Z. (2000). Cutting costs on hazard analysis critical control points systems in food catering: sampling frequency and the rate of misclassification. *Journal of Restaurant and Foodservice Marketing*, 4(1), 19-29.

Corlett, D.A., Jr. (1989). Refrigerated foods and use of hazard analysis and critical control point principles. *Food Technology*, 43 (2), 91-94.

Corlett, D.A., Jr. (1991). Regulatory verification of industrial HACCP principles. *Food Technology*, 45 (4), 144-146.

Guzewich, J. (1986). Statewide implementation of a HACCP food service regulatory program. *Journal of Environmental Health*, 49, 148-152.

Kennedy, T.K., Losinger, W.C., & Hoag, D.L. (2000). Who pays for Hazard Analysis and Critical Control Points. *Journal of Applied Animal Research*. 17(2), 197-200.

McIntyre, C.R. (1991). Hazard analysis critical control point (HACCP) identification. *Dairy, Food and Environmental Sanitation*, 11, 357-358.

Munce, B.A. (1984). Hazard analysis critical control points and the food service industry. *Food Technology Australia*, 36(5), 214-217, 222.

National Advisory Committee on Microbiological Criteria for Foods. (1998). Hazard analysis and critical control point system. *Journal of Food Protection*, 61, 1246-1259.

National Food Processors Association. (1992). HACCP and total quality management - winning concepts for the 90's: A review. *Journal of Food Protection*, 55, 459-462.

Savage, R.A. (1995). Hazard analysis critical control point: A critical review. *Food Research International*, 11(4), 575-595.

Sawyer, C. (1991). Safety issues related to take-out food. *Journal of Foodservice Systems*, 6(1), 41-59.

### **FOOD SAFETY KNOWLEDGE AND TRAINING JOURNAL ARTICLES**

Altekruse, S.F., Street, D.A., Fein, S.B., & Levy, A.S. (1996). Consumer knowledge of foodborne microbial hazards and food handling practices. *Journal of Food Protection*, 59, 287-294.

Buchholz, U., Run, G., Kool, J.L., Fielding, J., & Masola, L. (2002). A risk-based restaurant inspection system in Los Angeles County. *Journal of Food Protection*, 65, 367-372.



Cohen, E., Reichel, A., & Schwartz, Z. (2001). On the efficacy of an in-house food sanitation training program: Statistical measurements and practical conclusions. *Journal of Hospitality and Tourism Research*, 25(1), 5-16.

Cochran-Yantis, D., Belo, P., Giampaoli, J., McProud, L., Everly, V., & Gans, J. (1996). Attitudes and knowledge of food safety among Santa Clara County, California restaurant operators. *Journal of Foodservice Systems*, 9, 117-128.

Fielding, J.E., Aguirre, A., & Palailogos, E. (2001). Effectiveness of altered incentives in a food safety inspection program. *Preventive Medicine*, 32, 239-244.

Gravani, R.B. (1997). Coordinated approach to food safety education is needed. *Food Technology*, 51(7), 160.

Holdt, C.S. (1992). Attitudes and knowledge of university foodservice managers toward sanitation. *Journal of the National Association of College and University Food Services*, 16, 17-24.

Holt, C.E. (1998). Food safety in food retail establishments: A role for dietitians. *Topics in Clinical Nutrition*, 14(1), 1-8.

Irwin, K., Ballard, J., Grendon, J., & Kobayashi, J. (1989). Results of routine restaurant inspections can predict outbreaks of foodborne illnesses: The Seattle-King County experience. *American Journal of Public Health*, 19(5), 586-590.

Kneller, P., & Bierma, T. (1990). Food service certification: Measuring the effectiveness of a state program. *Journal of Environmental Health*, 52(5), 292-294.

Martin, K.E., Knabel, S., & Mendenhall, V. (1999). A model train-the-trainer program for HACCP-Based Food Safety Training in the retail/food service industry: An evaluation. *Journal of Extension*, 37. Retrieved: April 28, 2003, from <http://www.joe.org/joe/1999june/a1.html>

Metts, A., & Rodman, V. (1993). A guideline for evaluating the effectiveness of foodservice worker training/certification. *Dairy, Food and Environmental Sanitation*, 13, 565-567.

Metts, A., & Rodman, V. (1993). Improving inspection scores through training/certification of foodservice workers. *Dairy, Food and Environmental Sanitation*, 13, 450-453.

Penman, A.D., Webb, R.M., Woernie, C.H., & Currier, M.M. (1996). Failure of routine restaurant inspections: Restaurant-related foodborne outbreaks in Alabama, 1992, and Mississippi, 1993. *Journal of Environmental Health*, 58(8), 23-26.

Raval-Nelson, P., & Smith, P. (1999). Food safety certification and its impacts. *Journal of Environmental Health*, 61(7), 9-12.

Snyder, O.P., & Matthews, E. (1996). Food safety: Review and implications for dietitians and dietetic technicians. *Journal of the American Dietetic Association*, 96, 163-171.

Snyder, O.P. (1990). Food safety 2000: Applying HACCP for food safety assurance in the 21st century. *Dairy, Food and Environmental Sanitation*, 10, 197-204.

Speer, S.C., & Kane, B.E. (1990). Certification for foodservice managers: A survey of current opinion. *Journal of Food Protection*, 53, 269-274.

Sperber, W.H. (1991). The modern HACCP system. *Food Technology*, 45(6), 116-120.

Stevenson, K.E. (1990). Implementing HACCP in the food industry. *Food Technology*, 42(5), 179-180.

Stier, R.F., & Blumenthal, M.M. (1995). Will HACCP be carrot or stick. *Dairy, Food and Environmental Sanitation*, 15, 616-620.

Taubert, C.A. (1987). Defining sanitation hazards and critical control points in foodservice operations. *Journal of Foodservice Systems*, 2(3), 171-175.

Walczak, D. (1997). The sanitation imperative: Keep people from getting sick in your restaurant. *Cornell Hotel and Restaurant Administration Quarterly*, 38(2), 68-73.

### **MICROBIOLOGICAL JOURNAL ARTICLES**

Buchanan, R.L. (1995). The role of microbiological criteria and risk assessment in HACCP. *Food Microbiology*, 12, 421-424.

Montville, R., Chen, Y., & Schaffner, D.W. (2002). Risk assessment of hand washing efficacy using literature and experimental data. *International Journal of Food Microbiology*, 73, 302-313.

Montville, R., Chen, Y., & Schaffner, D.W. (2001). Glove barriers to bacterial cross-contamination between hands to food. *Journal of Food Protection*, 64, 845-849.

Silliker, J.H. (1995). Microbiological testing and HACCP programs. *Dairy, Food and Environmental Sanitation*, 15, 606-610.

Venter, P., Lues, R.J., Manyatsa, J.M., Moalusi, B.M., & Noe, H.M. (2003). The microbiological composition and related hygiene practices associated with a South African primary school feeding program. *Food Protection Trends*, 23, 382-386.

### **MAGAZINE ARTICLES**

Allen, R.L. (2000). Study shows shrinking consumer confidence in food safety practices. *Nation's Restaurant News*, 34(42), 1, 87.

- Custer, M.J. (1989). The challenge of sanitation. *Food Management*, 24, 56.
- Dulen, J. (1999, March) Food safety: HACCP appears effective. *Restaurants & Institutions*, 109(6), 112.
- Grover, S.F. (1999, December). HACCP not a one-size-fits all proposition. *Food Management*, 34(12), 62.
- Keener, L. (2000-2001, December-January). HACCP systems are prone to failure. *Food Safety Magazine*.
- King, P. (1992). Implementing a HACCP Program. *Food Management*, 27(5), 58.
- Martin, P. (1991). Hazard control. *Restaurant Business*, 1, 256.
- Neumann, R. (1998). The eight most frequent causes of foodborne illness. *Food Management*, 33(6), 28.
- Norton, C. (2002). Taking it step-by-step, HACCP step-by-step--Part I. *Food Management*, 37(1), 52-56.
- Norton, C. (2002). HACCP start-up steps, HACCP step-by-step--Part II. *Food Management*, 37(2), 60-61.
- Norton, C. (2002). Proper food handling is a cornerstone skill, HACCP step-by-step--Part III. *Food Management*, 37(3), 52, 54.
- Norton, C. (2002). HACCP--HACCP step-by-step--Part IV. *Food Management*, 37(4), 56, 58.
- Norton, C. (2002). Conducting a hazard analysis, HACCP step-by-step--Part V. *Food Management*, 37(8), 58, 60.
- Norton, C. (2002). Some other common hazards, HACCP step-by-step--Part VI. *Food Management*, 37(9), 58.
- Norton, C. (2002). Some other common hazards, HACCP step-by-step--Part VII. *Food Management*, 37(10), 70, 72.
- Norton, C. (2002). Establishing critical limits, HACCP step-by-step--Part VIII. *Food Management*, 37(12), 48-49.
- Norton, C. (2003). You've got to measure to manage, HACCP step-by-step--Part IX. *Food Management*, 38(1), 58,60.
- Norton, C. (2003). Don't Trust-Verify, HACCP step-by-step--Part X. *Food Management*, 38(2), 68,70.

Norton, C. (2003). Make Food Safety a Matter of Record, HACCP step-by-step--Part XI. *Food Management*, 38(3), 82,84.

Norton, C. (2003). Validation: HACCP's Final Step, HACCP step-by-step--Part XII. *Food Management*, 38(4), 70.

Rooney, J.J., & Kilkelly, J. (2002). On today's menu: Quality. *Quality Progress*, 35(2), 25-32.

Theodore, S. (1999, March). Smoothing out the bumps on the road to HACCP. *Beverage Industry*, 90, 56.

### **FOODSERVICE HACCP WEB SITES**

2001 FDA Model Food Code

Retrieved May 5, 2003, from <http://vm.cfsan.fda.gov/~dms/fc01-toc.html>

Food Safety Project--Iowa State University Extension

Retrieved May 5, 2003, from <http://www.extension.iastate.edu/foodsafety/>

Food Safety Research Information Office (FSRIO)--USDA

Retrieved May 5, 2003, from <http://www.nal.usda.gov/fsrio/>

Food Safety Throughout the Food System--Pennsylvania State University

Retrieved May 5, 2003, from <http://foodsafety.cas.psu.edu/>

Gateway to Government Food Safety Information--FDA

Retrieved May 5, 2003, from <http://www.foodsafety.gov>

HACCP Information Center--Iowa State University Extension

Retrieved May 5, 2003, from <http://www.iowahaccp.iastate.edu>

HACCP Resources--FDA Center for Food Safety and Applied Nutrition (CFSAN)

Retrieved May 5, 2003, from <http://vm.cfsan.fda.gov/%7Elrd/haccp.html>

HACCP--Food Safety Information/Arizona Cooperative Extension

Retrieved May 5, 2003, from <http://ag.arizona.edu/maricopa/fcs/haccp/index.htm>

HACCP Resources Database at Foodborne Illness Education Information Center--U.S.

Department of Agriculture (USDA)

Retrieved May 5, 2003, from <http://www.nal.usda.gov/fnic/foodborne/wais.shtml>

Integrated Food Safety Information Delivery System--Iowa Department of Inspections and Appeals

Retrieved May 5, 2003, from <http://www.profoodsafety.org>

International Meat and Poultry HACCP Alliance  
Retrieved May 5, 2003, from <http://haccpalliance.org>

Managing Food Safety: A HACCP Principles Guide for Operators of Food Establishments at the Retail Level--FDA CFSAN  
Retrieved May 5, 2003, from <http://www.cfsan.fda.gov/~dms/hret-toc.html>

National Coalition of Food Safe Schools  
Retrieved May 5, 2003, from <http://www.foodsafeschools.org/>

National Food Service Management Institute  
Retrieved May 5, 2003 from <http://www.nfsmi.org>

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