Food Safety Risks at School Not Related to School Meals: Should School Foodservice Managers Be Concerned?

Donna W. Lockner, PhD, RD, LD; Meghan E. Hildebrandt, MS, RD; Gabriela Pacheco, RD, LD, SFNS

Please note that this study was published before the implementation of Healthy, Hunger-Free Kids Act of 2010, which went into effect during the 2012-13 school year, and its provision for Smart Snacks Nutrition Standards for Competitive Food in Schools, implemented during the 2014-15 school year. As such, certain research may not be relevant today.

ABSTRACT

Recent interest in food safety in schools has centered on school foodservice workers and the safety of school meals (Almanza & Sneed, 2003; GAO, 2002; Giampaoli, Cluskey, & Sneed, 2002; Youn & Sneed, 2003). However, some outbreaks of foodborne illness at school have been attributed to food not related to school meals. The U.S. General Accounting Office (GAO) reports 19 of 59 large outbreaks of foodborne illness in schools between 1990 and 1999 were caused by food not related to school foodservice (GAO, 2000). Another study attempting to describe the causes of foodborne illness in U.S. schools between 1973 and 1997 found that 8% of the foods contributing to outbreaks were prepared at a private home and 5% were prepared by a caterer (Daniels et al., 2002). This means that there were times when individuals not affiliated with school foodservice were responsible for the outbreaks, yet any outbreak at school may be very damaging to the reputation of school foodservice. Parents and community members mistakenly may think that any offending foods are from school foodservice sources and may assume that school meals could be a potential risk for students and staff. This likely would have a negative impact on participation rates for school meals and the overall community perception of school foodservice.

One likely school venue for food sales by non-foodservice employees is fundraising events. Food sales as fundraisers are popular at many schools as a means to generate funds. Although foods sold on campus by booster clubs and student organizations may be an important source of revenue, they also can be potentially hazardous. Popular foods such as hamburgers, pizza, and burritos need to be handled carefully to avoid risk of foodborne illness.

The risk of illness increases when individuals unaware of safe food-handling practices are responsible for food preparation and storage. Activities coordinators, parent volunteers, or students may be responsible for food-related fundraisers, yet they may not be aware of proper food-handling techniques. Practices advocated by the FightBAC campaign (Partnership for Food Safety Education, 2002) such as handwashing, cooking foods adequately, avoiding cross-contamination, and keeping foods at safe temperatures may be unfamiliar to these individuals.

In addition to the health issues this scenario raises for students, potential liability can become a concern for school administrators. A recent outbreak of Escherichia coli 0157:H7 food poisoning at an elementary school resulted in a $4.75 million settlement, in which full responsibility was placed on those handling and serving the food, not on the food supplier (Cary, 2001). This demonstrates the importance of administrative leadership in promoting food safety (Connors, Kennon, Simons, & Balabuck, 2001). If administrators are not aware of the risks associated with
foodborne illness and the liability issues inherent in the sale of foods for fundraising, the consequences could be substantial.

Since the authors were not certain about the extent to which selling potentially hazardous foods in fundraisers is a problem, they surveyed school administrators of the Albuquerque, New Mexico district to determine the frequency of such sales. Due to the potential liability issue, they also asked about the administrators’ knowledge of food-handling permit requirements. The survey was reviewed by local health department safety officers and school foodservice administrators, and was mailed to the principals and assistant principals (n=81) of all middle schools and high schools in this large, metropolitan school district. The one-page survey consisted of questions attempting to identify 1) the type and frequency of food sales over the 2000-01 academic year, 2) who was responsible for authorizing food sales on school campuses, and 3) administrators’ knowledge of food-handling permit requirements. There was a 40% (n=32) response rate.

**Frequency and Type of Food Sales**

Almost all respondents (29 of 32) indicated that groups, organizations, or individuals other than school foodservice personnel sold many foods, including potentially hazardous foods, on secondary school campuses. The most frequently reported events that took place over the school year were sales of commercially prepared candy and soda products (a total of 2,166 events at 32 schools) and commercially prepared lunch entrees, such as pizza (a total of 2,105 events at 32 schools). These numbers reflect some schools that had daily food fundraising events. Although candy and soda are not considered potentially harmful foods, the lunch entrees are much more likely to be hazardous. While no known reported incidences of foodborne illness in school have been directly linked to pizza, some have been traced to other popular lunch items, such as hamburgers (GAO, 2000) and tacos (Cary, 2001). Less frequent events were team/club banquets, which were held in the school cafeteria but catered by private vendors (182 banquets at 32 schools). These responses indicate frequent sales of food and numerous meals served in the school cafeteria, all by non-foodservice employees.

**Authority for Food Sales**

Survey results indicate that several individuals have authority to approve food sales. Most respondents (25 of 32) specified the school principal as the person with the ability to authorize food sales on campus, while 11 pointed to school-wide activities coordinators and eight noted the assistant principals. Those cited with less authority to allow food sales were the activities directors for a specific event, Parent Teacher Organizations, event chairpersons, and DECA club advisors. No administrator reported allowing teachers to authorize food sales. While principals can delegate authority to others, they have ultimate responsibility for all food sales in their schools. It is surprising that less than 100% of respondents recognized the principal as having primary authority for any activity related to the school. Results may indicate that food sales are occurring without the principals’ knowledge and point to a lack of communication between school administrators and those authorizing food sales. It is important that principals, for safety and liability reasons, are aware of all foods being sold on campus. It is also the principals’ responsibility to communicate with those individuals authorizing food sales on campus so that they, too, can be advised of the necessary food-handling permits and the importance of safe food-handling practices.

**Knowledge of Food-handling Permit Requirements**

Food-handling permits are important as a means to prevent problems before they occur. Health department employees issuing permits review the planned activity and offer solutions on ways to keep foods safe. Therefore, securing a permit is a key step in minimizing the risk of foodborne
illness. When asked if a food-handling permit was required in various situations, administrators’ responses indicated poor knowledge of food-handling permit requirements. Only 13 of 32 respondents correctly identified that a food-handling permit is required for the sale of commercially prepared lunch entrees. In addition, only 15 answered correctly about requirements for team/club banquets catered by private vendors and served at school. While 22 of 32 administrators recognized that meals prepared by volunteers and sold on campus required a permit, only nine correctly indicated that meals sponsored by school organizations, but sold off campus, needed a permit. These low accuracy rates clearly indicate a need for education regarding permit requirements. Ensuring that permits are secured not only keeps the vendors in compliance with the law, but provides important food safety education to applicants.

**Implications for School Foodservice Managers**

Similar to the schools involved in this survey, many school districts throughout the country may use food sales as a means to generate funds. As a result, it is likely that school cafeterias are used for meals not prepared by foodservice employees. It appears that administrators are delegating authority for food sales to non-foodservice personnel who are not very knowledgeable about the requirements for food-handling permits. Results from this survey can be used to raise awareness of potential health risks and liability issues involved in having food fundraising programs on campus and placing non-foodservice personnel in charge of such programs.

Since school foodservice managers are trained in food safety, they are in key positions to advocate for educational programs that inform administrators about the risks of foodborne illness. Managers also should recommend protocols for obtaining food-handling permits. We encourage school foodservice personnel to work in conjunction with school administrators to ensure that all foods sold on campus are as safe as possible. Promoting campus-wide food safety will help protect the health of students and staff, as well as the reputation of school foodservice.

**REFERENCES**


**BIOGRAPHY**

**Lockner** and **Hildebrandt** are, respectively, assistant professor of nutrition and graduate student at the University of New Mexico. **Pacheco** is a former nutritional coordinator for Albuquerque Public Schools.