

Home-based Foodborne Illness

When several members of a household come down with sudden, severe diarrhea and vomiting, intestinal flu is often considered the likely culprit. But food poisoning may be another consideration.

A true diagnosis is often never made because the ill people recover without having to see a doctor. Health experts believe this is a common situation in households across the country, and because a doctor is often not seen for this kind of illness, the incidence of foodborne illness is not really known.

"Recently, Audits International in Highland Park, IL conducted a food safety audit in 106 households located in 81 cities across the U.S. and Canada. One of the most striking features of the study was that in 96 percent of the households visited, researchers observed at least one serious food safety problem. These are behaviors that by themselves put family members at risk of developing a foodborne illness just like the one briefly described at the beginning of this column. Fewer than 1 percent of the families observed met minimum food safety standards."

-- [*Is it the flu, or was it that dinner you cooked last night?* From The Olympian, March 11, 1998](#)

Thousands of types of bacteria are naturally present in our environment and not all bacteria cause disease in humans. For example, some bacteria are used beneficially in making cheese and yogurt. When certain pathogens (disease causing bacteria) enter the food supply they can cause foodborne illness. Only a few types of bacteria cause millions of cases of foodborne illness each year. Since proper cooking and processing destroy most pathogens, most cases of foodborne illness can be prevented.

Age and physical condition place some persons at higher risk than others. No matter what type of bacteria is implicated, infants, pregnant women, the elderly, and people with compromised immune systems are at greatest risk. Some persons may become ill after ingesting only a few harmful bacteria; others may remain symptom free after ingesting thousands.

A task force of the Council for Agricultural Science and Technology, a private organization of food science groups, estimated in 1994 that 6.5 million to 33 million cases of foodborne illness occur in the United States each year. While many reported cases stem from food prepared by commercial or institutional establishments, sporadic cases and small outbreaks in homes are considered to be far more common, according to the April 1995 issue of Food Technology.

Cases of home-based foodborne illness may become a bigger problem, some food safety experts say, partly because today's busy family may not be as familiar with food safety issues as more home-focused families of past generations. Others think that with information so readily available, foodborne illness should become less of a problem. We'll have to wait and see.

A 1993 FDA survey found that men respondents tended to be less safe about food practices than women respondents and that respondents younger than 40 tended to be less safe than those over 40. For example,

when asked if they believed that cooked food left at room temperature overnight is safe to eat without reheating--a very unsafe practice--12 percent of the men respondents (but only 5 percent of the women respondents) said yes. And, in looking at age differences, the survey found that nearly 40 percent of respondents younger than 40 indicated they did not adequately wash cutting boards, while only 25 percent of those 60 and over indicated the same.

The increased use of convenience foods, which often are preserved with special chemicals and processes, also complicates today's home food safety practices, said Joseph Madden, Ph.D., strategic manager for microbiology in FDA's Center for Food Safety and Applied Nutrition. These foods, such as TV dinners, which are specially preserved, give consumers a false idea that equivalent home-cooked foods are equally safe, he said. To curb the problem, food safety experts recommend food safety education that emphasizes the principles of HACCP (Hazard Analysis Critical Control Point), a food safety procedure that many food companies are now incorporating into their manufacturing processes. Unlike past practices, HACCP focuses on preventing foodborne hazards, such as microbial contamination, by identifying points at which hazardous materials can be introduced into the food and then monitoring these potential problem areas. "It's mainly taking a common-sense approach towards food safety in the home," said FDA microbiologist Jeffery Rhodehamel. "Basically, consumers need to make sure they're not defeating the system by contaminating the product."

Follow these simple steps to prevent contamination with dust, dirt or insects.

- Avoid storing food in cabinets that are under the sink or have water, drain and heating pipes passing through them. Food stored here can attract insects and rodents through openings that are difficult to seal adequately.
- Wash the tops of cans with soap and water before opening.

By just taking a few precautions and changing the way you handle, store, and cook foods, you can improve the chances of health for your family. And when they get sick, hopefully it'll just be the flu instead of food poisoning.