

Food Defense

Food defense can be defined broadly as protecting the food supply from deliberate contamination. Although always considered by regulators and processors in food safety procedures, the threat of an intentional attack on the U.S. food and water supply has become an even more important issue in recent years. The centralized nature of food production and processing and the wide distribution of foods, both domestic and imported, make the food sector a target. Food or water could be compromised by being a primary vector to deliver a biologic or chemical weapon, or a secondary target, where the amount of food or water becomes inadequate to feed the population. In addition to the physical and nutritional consequences of inedible or insufficient food and water, a compromised food supply also could have significant psychological, political, and economic consequences. Any link in the food production chain is potentially susceptible and an attack could cause an erosion of public confidence in the food supply with the potential economic ruin for certain food producers.

Food contaminated by biologic, chemical, or radiological agents may be difficult to handle by traditional methods of product testing and recall involving contaminant identification and destruction. In addition, control and disposal of contaminated food could seriously disrupt the flow of safe food to consumers. Research into rapid test methodologies and product traceability systems generates new products and procedures employed throughout the food sector. Because the intentional use of one of these agents could be mistaken for a normal episode of foodborne illness, food producers, manufacturers, distributors, retailers, in addition to federal, state, and local authorities, have preparedness, planning, rapid communication, and central analysis measures in place to identify the early phase of a hostile act, and work quickly to minimize the impact on the food supply and public health.