The 5 I’s are Used in a Food Poisoning Outbreak Wrap-Up

In instances where the number of bacteria in a sample is expected to be especially large, as would be the case with a fecal sample, many types of specialized media may be used to narrow the possibilities. Selective media contain inhibitory substances that allow only a single type of microbe to grow, while differential media allow most organisms to grow but produce visible differences among the various microbes. In this case, samples of the casserole the prisoners had eaten were analyzed using both selective and differential media and found to contain 43,000 colony-forming units (CFU) of *C. perfringens* per gram of casserole.

Investigators learned that the company distributing meals to the jail routinely froze food that was not served and held it for up to 72 hours before using it to prepare dishes for later consumption. In this case, the ground beef and macaroni had been cooked the previous day, and several other food items were near their expiration dates. Also, proper documentation of cooling temperatures for both the ground beef and the macaroni was unavailable. Investigators concluded that improper handling of food in the kitchen was responsible for the prisoners’ illness.